



## INFORMATION TECHNOLOGY: PAPER I

### INSTRUCTIONS TO TEACHERS AND CHIEF INVIGILATORS

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#### TO THE TEACHER RESPONSIBLE FOR CANDIDATES OFFERING THE INFORMATION TECHNOLOGY PRACTICAL EXAMINATION

#### INSTRUCTIONS CONCERNING DATA FILES SUPPLIED IN THE IEB ELECTRONIC POSTBOX: ASSESSMENT MATERIAL

You have been supplied with files in the IEB Electronic Postbox. It is the responsibility of the Information Technology teacher to check **two days before the examination** that they can open the files and that the files can be read by the relevant applications. Printouts of the files are given, starting on page 3 of this document. The details of the files are as follows:

**Files for learners: please consult the folders in the IEB Electronic Postbox. These are the important files only.**

#### **Section A:**

ScientiaUniversity.mdb  
ScientiaUniversity\_JavaDB.sql  
ScientiaUniversity\_MySQL.sql  
SQLAnswerSheet.rtf  
SQLBrowser.exe

#### **Section B:**

candidates.txt  
researchPapers.txt

If you have any problems with accessing the files in the IEB Electronic Postbox, please notify the IEB immediately.

Individual copies of these files will be required by each candidate writing the Information Technology Practical Examination (Paper I). Please copy the relevant files onto the disk space that will be used exclusively by each candidate.

Confidentiality is of the utmost importance. Under no circumstances should candidates have access to these files before the examination.

#### **After the examination:**

- A backup of each candidate's work must also be made and kept at the school on suitable storage media until 19 August 2022 when the re-marking process will have been completed.
- **A completed and signed copy of the attached PRACTICAL EXAMINATION DECLARATION IN GRADE 12, must be forwarded to the IEB by 20 May 2022.**

**LETTER FROM THE HIGH SCHOOL HEAD AND IT TEACHER(S)**



Name of School	
Centre Number	
Completed by	
Designation	

The IEB  
P O Box 875  
Highlands North  
2037

Dear IEB

**RE: PRACTICAL EXAMINATION DECLARATION IN GRADE 12, 2022**

**INFORMATION TECHNOLOGY**

<b>We certify that we have ensured that:</b>	<b>Cross your response</b>	
all the work in each candidate's folder has been copied from the examination location and emailed to the IEB without any modification whatsoever to <a href="mailto:themban@ieb.co.za">themban@ieb.co.za</a> and cc: pillaya@ieb.co.za.	YES	NO
all the work in each candidate's folder is the work of that candidate only.	YES	NO
<b>NO CANDIDATE HAD ACCESS TO THE INTERNET DURING THE EXAMINATION.</b>	<b>YES</b>	<b>NO</b>
no help or assistance at all was given to or allowed to be given to any candidate other than that of a technical nature – either a computer malfunction or a power failure.	YES	NO
a comprehensive incident report describing the computer malfunction and/or the power failure has been sent to the IEB.	YES	NO
a copy of each candidate's work has been saved on the school system and will be kept at the school on relevant storage media until 19 August 2022 when the re-marking process has been completed.	YES	NO

\_\_\_\_\_  
**IT EDUCATOR(S)**

\_\_\_\_\_  
**HEAD**

\_\_\_\_\_  
**DATE**

\_\_\_\_\_  
**DATE**

## FILES FOR LEARNERS

The following pages contain the hard-copy printouts of the data supplied to each of the candidates.

### SECTION A

#### ScientiaUniversity.mdb

##### tblResearchers Table

Data may be formatted differently on your computer depending on its settings.

ResearcherID	Firstname	Surname	Department
1	Gloria	Mofokeng	MatSci
2	Tshegofatso	Theron	LawMed
3	Jean	Kumalo	HumArt
4	Jennifer	Stander	BusCom
5	Cheryl	Snyman	BusCom
6	Clint	Mazibuko	BusCom
7	Arthur	Sibeko	BusCom
8	Grace	Ross	HumArt
9	Nonhlanhla	Mazibuko	BusCom
10	Eric	Mathebula	MatSci
11	Sonja	de Kock	LawMed
12	Antoinette	Kumalo	BusCom
13	Kelebogile	van Heerden	HumArt
14	Mike	Wilson	MatSci
15	Kabelo	Ndebele	HumArt
16	Deborah	le Roux	LawMed
17	Shaun	Tshabalala	LawMed
18	Daniel	Khan	BusCom
19	Juan	Jooste	MatSci
20	Simone	Green	LawMed

### tblSupervisors Table

Data may be formatted differently on your computer depending on its settings.

SupervisorID	SupervisorName	Department	MaxCapacity
1	Charmaine Kumalo	BusCom	2
2	Janine Liebenberg	MatSci	3
3	Ayanda Thompson	BusCom	4
4	Thato de Kock	MatSci	3
5	Fikile Naicker	LawMed	2
6	Stephen van Dyk	BusCom	3
7	Xolani Beukes	HumArt	1
8	Siphiwe Mthembu	BusCom	1
9	Sam de Jager	HumArt	4
10	Mpho Geldenhuys	BusCom	4

### tblResearchProjects Table

Data may be formatted differently on your computer depending on its settings.

ResearchProjectID	ProjectName	SupervisorID	DateStarted	GrantAmount
1	Violet Liberty	4	2018/11/06	150000
2	Steel Packer	5	2019/03/11	240000
3	Feisty Cobra	3	2018/09/11	210000
4	Dapper Crown	4	2018/11/20	80000
5	Late Hawk	3	2016/09/26	50000
6	Gifted Neptune	5	2017/08/24	160000
7	Dark Luna	4	2017/04/30	110000
8	Twilight Lotus	8	2016/10/23	60000
9	Arctic Pawn	9	2017/06/04	80000
10	Exotic Flower	9	2017/07/30	160000
11	Jasper Doctor	6	2016/11/30	80000
12	Calm Supernova	3	2017/02/28	140000
13	Swift Beehive	3	2018/01/03	80000
14	Eager Gambit	8	2019/11/19	210000
15	Brave Guardian	6	2018/10/04	80000
16	Misty Wing	1	2018/10/24	240000
17	Incredible Traveler	9	2019/04/16	190000
18	White Traveler	7	2018/07/03	200000
19	Light Chariot	6	2016/12/29	230000
20	Dead Lancer	10	2020/02/03	240000
21	Blushing Hawk	1	2019/08/18	90000
22	Innocent Bee	5	2016/09/26	130000
23	Discrete Cat	10	2016/11/17	120000
24	Secret Ninja	4	2019/02/14	250000
25	Original Angel	8	2018/08/07	240000
26	Grizzly Saturn	6	2019/01/03	120000

27	Busy Volcano	6	2019/09/22	80000
28	Infamous Sherpa	9	2015/10/13	120000
29	Delirious Templer	1	2016/09/22	220000
30	Perfect Skies	10	2017/12/15	90000

### tblAllocations Table

Data may be formatted differently on your computer depending on its settings.

ResearcherID	ResearchProjectID	DateAssigned	IsLead
1	2	2018/11/06	No
1	13	2019/03/11	No
1	15	2018/09/11	No
2	11	2018/11/20	Yes
2	14	2016/09/26	Yes
2	19	2017/08/24	Yes
2	21	2017/04/30	No
3	3	2016/10/23	Yes
3	12	2017/06/04	No
3	28	2017/07/30	No
4	1	2016/11/30	Yes
5	1	2017/02/28	No
5	2	2018/01/03	Yes
5	6	2019/11/19	Yes
5	9	2018/10/04	No
5	13	2018/10/24	Yes
5	15	2019/04/16	No
5	19	2018/07/03	No
5	20	2016/12/29	No
5	23	2020/02/03	Yes
6	13	2019/08/18	No
6	14	2016/09/26	No
6	28	2016/11/17	No
7	11	2019/02/14	No
7	19	2018/08/07	No
8	4	2019/01/03	No
8	10	2019/09/22	No
8	25	2015/10/13	No
8	28	2016/09/22	Yes
9	5	2017/12/15	Yes
9	12	2016/10/30	Yes
10	10	2018/10/10	Yes
10	14	2016/09/26	No
10	17	2018/01/23	Yes
11	4	2018/07/15	Yes

11	7	2016/03/21	No
11	20	2016/12/30	No
11	23	2020/02/03	No
11	27	2020/04/06	Yes
12	1	2017/02/19	No
12	15	2018/12/16	No
12	24	2016/04/30	Yes
12	26	2019/02/10	Yes
13	9	2019/03/19	No
13	17	2018/01/24	No
13	18	2016/07/19	No
13	26	2019/05/22	No
14	9	2018/08/11	Yes
14	12	2016/10/30	No
14	15	2018/12/01	No
14	16	2017/05/29	Yes
14	18	2015/08/15	Yes
14	19	2017/08/24	No
14	25	2015/10/13	Yes
14	29	2017/10/20	No
15	4	2018/08/08	No
15	7	2016/03/05	Yes
15	12	2016/10/30	No
15	15	2018/08/26	Yes
15	18	2016/06/02	No
16	26	2019/09/28	No
16	30	2016/05/11	Yes

## ScientiaUniversity\_JavaDB.sql

```
CREATE TABLE tblResearchers (  
  ResearcherID INTEGER NOT NULL PRIMARY KEY  
  GENERATED ALWAYS AS IDENTITY  
  (START WITH 1, INCREMENT BY 1),  
  Firstname VARCHAR(60),  
  Surname VARCHAR(60),  
  Department VARCHAR(60)  
);
```

```
CREATE TABLE tblSupervisors (  
  SupervisorID INTEGER NOT NULL PRIMARY KEY  
  GENERATED ALWAYS AS IDENTITY  
  (START WITH 1, INCREMENT BY 1),  
  SupervisorName VARCHAR(60),  
  Department VARCHAR(60),  
  MaxCapacity INTEGER  
);
```

```
CREATE TABLE tblResearchProjects (  
  ResearchProjectID INTEGER NOT NULL PRIMARY KEY  
  GENERATED ALWAYS AS IDENTITY  
  (START WITH 1, INCREMENT BY 1),  
  ProjectName VARCHAR(60),  
  SupervisorID INTEGER,  
  DateStarted DATE,  
  GrantAmount INTEGER  
);
```

```
CREATE TABLE tblAllocations (  
  ResearcherID INTEGER NOT NULL,  
  ResearchProjectID INTEGER NOT NULL,  
  DateAssigned DATE,  
  isLead BOOLEAN,  
  PRIMARY KEY(ResearcherID, ResearchProjectID)  
);
```

```
INSERT INTO tblResearchers(Firstname, Surname, Department)  
VALUES  
( 'Gloria', 'Mofokeng', 'MatSci' ),  
( 'Tshegofatso', 'Theron', 'LawMed' ),  
( 'Jean', 'Kumalo', 'HumArt' ),  
( 'Jennifer', 'Stander', 'BusCom' ),  
( 'Cheryl', 'Snyman', 'BusCom' ),  
( 'Clint', 'Mazibuko', 'BusCom' ),  
( 'Arthur', 'Sibeko', 'BusCom' ),  
( 'Grace', 'Ross', 'HumArt' ),  
( 'Nonhlanhla', 'Mazibuko', 'BusCom' ),  
( 'Eric', 'Mathebula', 'MatSci' ),  
( 'Sonja', 'de Kock', 'LawMed' ),  
( 'Antoinette', 'Kumalo', 'BusCom' ),  
( 'Kelebogile', 'van Heerden', 'HumArt' ),  
( 'Mike', 'Wilson', 'MatSci' ),  
( 'Kabelo', 'Ndebele', 'HumArt' ),  
( 'Deborah', 'le Roux', 'LawMed' ),  
( 'Shaun', 'Tshabalala', 'LawMed' ),  
( 'Daniel', 'Khan', 'BusCom' ),  
( 'Juan', 'Jooste', 'MatSci' ),  
( 'Simone', 'Green', 'LawMed' );
```

```
INSERT INTO tblSupervisors(SupervisorName, Department, MaxCapacity)
```

VALUES

```
('Charmaine Kumalo', 'BusCom', 2),  
( 'Janine Liebenberg', 'MatSci', 3),  
( 'Ayanda Thompson', 'BusCom', 4),  
( 'Thato de Kock', 'MatSci', 3),  
( 'Fikile Naicker', 'LawMed', 2),  
( 'Stephen van Dyk', 'BusCom', 3),  
( 'Xolani Beukes', 'HumArt', 1),  
( 'Siphiwe Mthembu', 'BusCom', 1),  
( 'Sam de Jager', 'HumArt', 4),  
( 'Mpho Geldenhuys', 'BusCom', 4);
```

INSERT INTO tblResearchProjects

```
(ProjectName,SupervisorID,GrantAmount,DateStarted)
```

VALUES

```
('Violet Liberty', 4, 150000, '2016-11-30'),  
( 'Steel Packer', 5, 240000, '2018-01-03'),  
( 'Feisty Cobra', 3, 210000, '2016-10-23'),  
( 'Dapper Crown', 4, 80000, '2018-07-15'),  
( 'Late Hawk', 3, 50000, '2017-07-31'),  
( 'Gifted Neptune', 5, 160000, '2019-11-19'),  
( 'Dark Luna', 4, 110000, '2016-03-05'),  
( 'Twilight Lotus', 8, 60000, '2017-03-03'),  
( 'Arctic Pawn', 9, 80000, '2018-08-11'),  
( 'Exotic Flower', 9, 160000, '2018-10-10'),  
( 'Jasper Doctor', 6, 80000, '2018-11-20'),  
( 'Calm Supernova', 3, 140000, '2016-10-30'),  
( 'Swift Beehive', 3, 80000, '2018-10-24'),  
( 'Eager Gambit', 8, 210000, '2016-09-26'),  
( 'Brave Guardian', 6, 80000, '2018-08-26'),  
( 'Misty Wing', 1, 240000, '2017-05-29'),  
( 'Incredible Traveler', 9, 190000, '2018-01-23'),  
( 'White Traveler', 7, 200000, '2015-08-15'),  
( 'Light Chariot', 6, 230000, '2017-08-24'),  
( 'Dead Lancer', 10, 240000, '2016-08-14'),  
( 'Blushing Hawk', 1, 90000, '2016-09-25'),  
( 'Innocent Bee', 5, 130000, '2015-08-31'),  
( 'Discrete Cat', 10, 120000, '2020-02-03'),  
( 'Secret Ninja', 4, 250000, '2016-04-30'),  
( 'Original Angel', 8, 240000, '2015-10-13'),  
( 'Grizzly Saturn', 6, 120000, '2019-02-10'),  
( 'Busy Volcano', 6, 80000, '2020-04-06'),  
( 'Infamous Sherpa', 9, 120000, '2016-09-22'),  
( 'Delirious Templar', 1, 220000, '2017-10-20'),  
( 'Perfect Skies', 10, 90000, '2016-05-11');
```

INSERT INTO tblAllocations (ResearcherID,DateAssigned,ResearchProjectID,IsLead)

VALUES

```
(9, '2016-10-30', 12, TRUE),  
(8, '2015-10-13', 25, FALSE),  
(1, '2019-03-11', 13, FALSE),  
(5, '2017-02-28', 1, FALSE),  
(15, '2016-10-30', 12, FALSE),  
(5, '2016-12-29', 20, FALSE),  
(10, '2018-10-10', 10, TRUE),  
(12, '2017-02-19', 1, FALSE),  
(15, '2018-08-08', 4, FALSE),  
(6, '2016-11-17', 28, FALSE),  
(15, '2016-06-02', 18, FALSE),  
(16, '2019-09-28', 26, FALSE),  
(11, '2020-02-03', 23, FALSE),  
(13, '2018-01-24', 17, FALSE),  
(2, '2016-09-26', 14, TRUE),  
(11, '2018-07-15', 4, TRUE),
```

```
(2, '2017-08-24', 19, TRUE),
(12, '2016-04-30', 24, TRUE),
(14, '2015-10-13', 25, TRUE),
(14, '2018-08-11', 9, TRUE),
(2, '2017-04-30', 21, FALSE),
(14, '2015-08-15', 18, TRUE),
(13, '2016-07-19', 18, FALSE),
(1, '2018-09-11', 15, FALSE),
(7, '2019-02-14', 11, FALSE),
(6, '2016-09-26', 14, FALSE),
(3, '2017-06-04', 12, FALSE),
(1, '2018-11-06', 2, FALSE),
(5, '2020-02-03', 23, TRUE),
(12, '2018-12-16', 15, FALSE),
(14, '2017-10-20', 29, FALSE),
(12, '2019-02-10', 26, TRUE),
(14, '2016-10-30', 12, FALSE),
(11, '2020-04-06', 27, TRUE),
(4, '2016-11-30', 1, TRUE),
(3, '2017-07-30', 28, FALSE),
(13, '2019-05-22', 26, FALSE),
(2, '2018-11-20', 11, TRUE),
(11, '2016-03-21', 7, FALSE),
(5, '2018-10-24', 13, TRUE),
(16, '2016-05-11', 30, TRUE),
(14, '2017-08-24', 19, FALSE),
(13, '2019-03-19', 9, FALSE),
(8, '2019-01-03', 4, FALSE),
(14, '2018-12-01', 15, FALSE),
(5, '2018-07-03', 19, FALSE),
(8, '2019-09-22', 10, FALSE),
(7, '2018-08-07', 19, FALSE),
(5, '2018-01-03', 2, TRUE),
(8, '2016-09-22', 28, TRUE),
(14, '2017-05-29', 16, TRUE),
(5, '2019-11-19', 6, TRUE),
(15, '2016-03-05', 7, TRUE),
(3, '2016-10-23', 3, TRUE),
(5, '2019-04-16', 15, FALSE),
(6, '2019-08-18', 13, FALSE),
(5, '2018-10-04', 9, FALSE),
(10, '2018-01-23', 17, TRUE),
(10, '2016-09-26', 14, FALSE),
(11, '2016-12-30', 20, FALSE),
(15, '2018-08-26', 15, TRUE),
(9, '2017-12-15', 5, TRUE);
```

### **ScientiaUniversity\_MySQL.sql**

```
CREATE TABLE tblResearchers (
  ResearcherID INT PRIMARY KEY AUTO_INCREMENT,
  Firstname VARCHAR(60),
  Surname VARCHAR(60),
  Department VARCHAR(60)
);
```

```
CREATE TABLE tblSupervisors (
  SupervisorID INT PRIMARY KEY AUTO_INCREMENT,
  SupervisorName VARCHAR(60),
  Department VARCHAR(60),
  MaxCapacity INT
);
```

);

```
CREATE TABLE tblResearchProjects (
ResearchProjectID INT PRIMARY KEY AUTO_INCREMENT,
ProjectName VARCHAR(60),
SupervisorID INT,
DateStarted DATE,
GrantAmount INT
);
```

```
CREATE TABLE tblAllocations (
ResearcherID INT NOT NULL,
ResearchProjectID INT NOT NULL,
DateAssigned DATE,
isLead BOOLEAN,
PRIMARY KEY(ResearcherID, ResearchProjectID)
);
```

```
INSERT INTO tblResearchers(ResearcherID , Firstname,Surname,Department)
VALUES
(1,'Gloria','Mofokeng','MatSci'),
(2,'Tshegofatso','Theron','LawMed'),
(3,'Jean','Kumalo','HumArt'),
(4,'Jennifer','Stander','BusCom'),
(5,'Cheryl','Snyman','BusCom'),
(6,'Clint','Mazibuko','BusCom'),
(7,'Arthur','Sibeko','BusCom'),
(8,'Grace','Ross','HumArt'),
(9,'Nonhlanhla','Mazibuko','BusCom'),
(10,'Eric','Mathebula','MatSci'),
(11,'Sonja','de Kock','LawMed'),
(12,'Antoinette','Kumalo','BusCom'),
(13,'Kelebogile','van Heerden','HumArt'),
(14,'Mike','Wilson','MatSci'),
(15,'Kabelo','Ndebele','HumArt'),
(16,'Deborah','le Roux','LawMed'),
(17,'Shaun','Tshabalala','LawMed'),
(18,'Daniel','Khan','BusCom'),
(19,'Juan','Jooste','MatSci'),
(20,'Simone','Green','LawMed');
```

```
INSERT INTO tblSupervisors(SupervisorID ,
SupervisorName,Department,MaxCapacity)
VALUES
(1,'Charmaine Kumalo','BusCom',2),
(2,'Janine Liebenberg','MatSci',3),
(3,'Ayanda Thompson','BusCom',4),
(4,'Thato de Kock','MatSci',3),
(5,'Fikile Naicker','LawMed',2),
(6,'Stephen van Dyk','BusCom',3),
(7,'Xolani Beukes','HumArt',1),
(8,'Siphiwe Mthembu','BusCom',1),
(9,'Sam de Jager','HumArt',4),
(10,'Mpho Geldenhuys','BusCom',4);
```

```
INSERT INTO tblResearchProjects (ResearchProjectID ,
ProjectName,SupervisorID,GrantAmount,DateStarted)
VALUES
(1,'Violet Liberty',4,150000,'2016-11-30'),
(2,'Steel Packer',5,240000,'2018-01-03'),
(3,'Feisty Cobra',3,210000,'2016-10-23'),
(4,'Dapper Crown',4,80000,'2018-07-15'),
```

(5, 'Late Hawk', 3, 50000, '2017-07-31'),  
(6, 'Gifted Neptune', 5, 160000, '2019-11-19'),  
(7, 'Dark Luna', 4, 110000, '2016-03-05'),  
(8, 'Twilight Lotus', 8, 60000, '2017-03-03'),  
(9, 'Arctic Pawn', 9, 80000, '2018-08-11'),  
(10, 'Exotic Flower', 9, 160000, '2018-10-10'),  
(11, 'Jasper Doctor', 6, 80000, '2018-11-20'),  
(12, 'Calm Supernova', 3, 140000, '2016-10-30'),  
(13, 'Swift Beehive', 3, 80000, '2018-10-24'),  
(14, 'Eager Gambit', 8, 210000, '2016-09-26'),  
(15, 'Brave Guardian', 6, 80000, '2018-08-26'),  
(16, 'Misty Wing', 1, 240000, '2017-05-29'),  
(17, 'Incredible Traveler', 9, 190000, '2018-01-23'),  
(18, 'White Traveler', 7, 200000, '2015-08-15'),  
(19, 'Light Chariot', 6, 230000, '2017-08-24'),  
(20, 'Dead Lancer', 10, 240000, '2016-08-14'),  
(21, 'Blushing Hawk', 1, 90000, '2016-09-25'),  
(22, 'Innocent Bee', 5, 130000, '2015-08-31'),  
(23, 'Discrete Cat', 10, 120000, '2020-02-03'),  
(24, 'Secret Ninja', 4, 250000, '2016-04-30'),  
(25, 'Original Angel', 8, 240000, '2015-10-13'),  
(26, 'Grizzly Saturn', 6, 120000, '2019-02-10'),  
(27, 'Busy Volcano', 6, 80000, '2020-04-06'),  
(28, 'Infamous Sherpa', 9, 120000, '2016-09-22'),  
(29, 'Delirious Templer', 1, 220000, '2017-10-20'),  
(30, 'Perfect Skies', 10, 90000, '2016-05-11');

INSERT INTO tblAllocations (ResearcherID, DateAssigned, ResearchProjectID, IsLead)  
VALUES

(9, '2016-10-30', 12, TRUE),  
(8, '2015-10-13', 25, FALSE),  
(1, '2019-03-11', 13, FALSE),  
(5, '2017-02-28', 1, FALSE),  
(15, '2016-10-30', 12, FALSE),  
(5, '2016-12-29', 20, FALSE),  
(10, '2018-10-10', 10, TRUE),  
(12, '2017-02-19', 1, FALSE),  
(15, '2018-08-08', 4, FALSE),  
(6, '2016-11-17', 28, FALSE),  
(15, '2016-06-02', 18, FALSE),  
(16, '2019-09-28', 26, FALSE),  
(11, '2020-02-03', 23, FALSE),  
(13, '2018-01-24', 17, FALSE),  
(2, '2016-09-26', 14, TRUE),  
(11, '2018-07-15', 4, TRUE),  
(2, '2017-08-24', 19, TRUE),  
(12, '2016-04-30', 24, TRUE),  
(14, '2015-10-13', 25, TRUE),  
(14, '2018-08-11', 9, TRUE),  
(2, '2017-04-30', 21, FALSE),  
(14, '2015-08-15', 18, TRUE),  
(13, '2016-07-19', 18, FALSE),  
(1, '2018-09-11', 15, FALSE),  
(7, '2019-02-14', 11, FALSE),  
(6, '2016-09-26', 14, FALSE),  
(3, '2017-06-04', 12, FALSE),  
(1, '2018-11-06', 2, FALSE),  
(5, '2020-02-03', 23, TRUE),  
(12, '2018-12-16', 15, FALSE),  
(14, '2017-10-20', 29, FALSE),  
(12, '2019-02-10', 26, TRUE),  
(14, '2016-10-30', 12, FALSE),  
(11, '2020-04-06', 27, TRUE),

```
(4, '2016-11-30', 1, TRUE),  
(3, '2017-07-30', 28, FALSE),  
(13, '2019-05-22', 26, FALSE),  
(2, '2018-11-20', 11, TRUE),  
(11, '2016-03-21', 7, FALSE),  
(5, '2018-10-24', 13, TRUE),  
(16, '2016-05-11', 30, TRUE),  
(14, '2017-08-24', 19, FALSE),  
(13, '2019-03-19', 9, FALSE),  
(8, '2019-01-03', 4, FALSE),  
(14, '2018-12-01', 15, FALSE),  
(5, '2018-07-03', 19, FALSE),  
(8, '2019-09-22', 10, FALSE),  
(7, '2018-08-07', 19, FALSE),  
(5, '2018-01-03', 2, TRUE),  
(8, '2016-09-22', 28, TRUE),  
(14, '2017-05-29', 16, TRUE),  
(5, '2019-11-19', 6, TRUE),  
(15, '2016-03-05', 7, TRUE),  
(3, '2016-10-23', 3, TRUE),  
(5, '2019-04-16', 15, FALSE),  
(6, '2019-08-18', 13, FALSE),  
(5, '2018-10-04', 9, FALSE),  
(10, '2018-01-23', 17, TRUE),  
(10, '2016-09-26', 14, FALSE),  
(11, '2016-12-30', 20, FALSE),  
(15, '2018-08-26', 15, TRUE),  
(9, '2017-12-15', 5, TRUE);
```

## SECTION B

### **candidates.txt**

2014969#Ayanda Robertson#8  
2016618#Pieter Evans#6  
2016439#Gail Ntombela#6  
2015846#Lloyd De Klerk#7  
2018111#Lindiwe Kleynhans#4  
2016564#Albert Cronje#6  
2017619#Fikile Bezuidenhout#5  
2016281#Garth Marx#6  
2017492#Mark Schoeman#5  
2014181#Constance Swartz#8  
2018402#Natalie Snyman#4  
2017433#Tania Chetty#5  
2017436#Sibusiso Scholtz#5  
2016871#Tumelo Mthembu#6  
2014811#Terence Joubert#8  
2017810#Lee Madlala#5  
2015881#Ntokozo Francis#7  
2016334#Clint Mazibuko#6  
2015413#Arthur Sibeko#7  
2014950#Grace Ross#8

**researchPapers.txt**

A Discussion on Naturalistic Theory#HumArt#FALSE#81FF#2014811  
Agricultural Law in South Africa#LawMed#TRUE#150TT#2018402  
Understanding Random Sampling#MatSci#FALSE#126FT#2018111  
Homelessness in South Africa#HumArt#FALSE#92TT#2017436  
Romanticism in the Enlightenment Era#HumArt#FALSE#102FF#2016871  
Nature of Business Competition#BusCom#TRUE#112TF#2014950  
A Study of Light Painting#HumArt#FALSE#131FF#2014181  
Tax Reforms Effects on the Economy#LawMed#FALSE#82TF#2017810  
Review of the Great Depression#BusCom#FALSE#124FT#2015881  
Behaviour of Currencies#BusCom#TRUE#106TT#2014969  
Ancient Greek Theater#HumArt#FALSE#109FF#2015846  
Copyright Infringements in Music#LawMed#TRUE#250TT#2017619  
Understanding the Placi Effect#MatSci#FALSE#121FT#2017492  
Muscle systems in the Human Body#MatSci#FALSE#88FF#2016618  
Fate in Greek Mythology#HumArt#TRUE#224TT#2016564  
Media versus Materialism#HumArt#TRUE#108TT#2016439  
Principals of Multiculturalism#HumArt#FALSE#84FT#2016334  
Understanding Businees#BusCom#TRUE#125TT#2017433  
Mathematics in Artificial Intelligence#MatSci#TRUE#201TT#2016281  
The Theft Act#LawMed#FALSE#135FF#2015413