Q1.a)1.create folder named "RPracticle" in home directory
2.set working directory to this folder
3.create vector with values (7,4,na,9,10,na)
4.impute median in above vector
5.display above created median
Output:

```
LPPOP. Object cacarscreen not found
> setwd("C:\\Users\\user\\Desktop\\RPractical\\")
> getwd()
[1] "C:/Users/user/Desktop/RPractical"
> x<-c(7,4,NA,9,10,NA)
> getwd()
[1] "C:/Users/user/Desktop/RPractical"
> median(v)
Error in median(v) : object 'v' not found
> median(x)
[1] NA
> median(x, na.rm = T)
[1] 8

>
> vec <- c(7, 4, NA, 9, 10, NA)
> med <- median(vec, na.rm = TRUE)
> imputed_vec <- ifelse(is.na(vec), med, vec)
> imputed_vec
[1]  7  4  8  9 10  8
> med
[1] 8
```

Q2.A
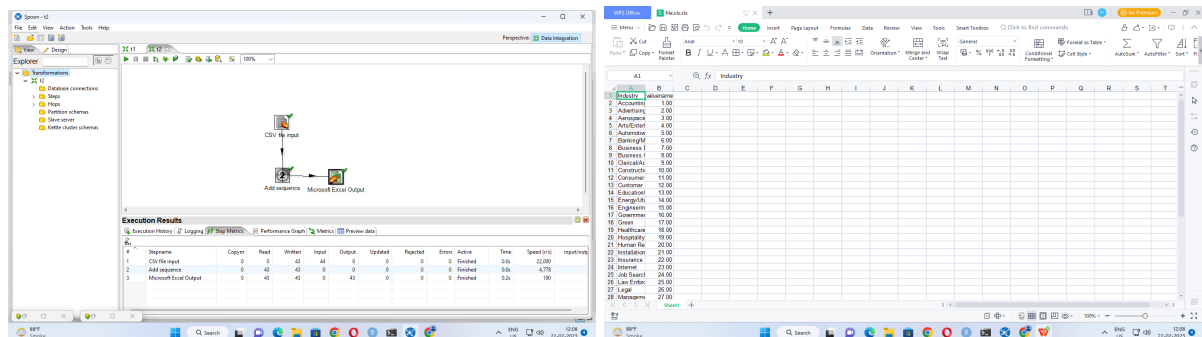
Q2B

```
SQL> create type PASSENGER_TYPE as object
  2  (PID NUMBER,
  3  Pname varchar2(10),
  4  Address varchar2(10),
  5  DESTINATION VARCHAR2(10),
  6  AGE NUMBER
  7  );
  8  /

Type created.
```

```
SQL> SELECT * FROM PASSENGER_DTLS1;

       PID
----------
DETAIL(PID, PNAME, ADDRESS, DESTINATION, AGE)
---------------------------------------------------
         1
PASSENGER_TYPE(1, 'PRASAD', 'THANE', 'UP', 23)

         2
PASSENGER_TYPE(2, 'SANKET', 'MUMBAI', 'MP', 24)

         3
PASSENGER_TYPE(3, 'ROHIT', 'PUNE', 'HR', 25)

       PID
----------
DETAIL(PID, PNAME, ADDRESS, DESTINATION, AGE)
---------------------------------------------------
         4
PASSENGER_TYPE(4, 'MOHIT', 'CHENNAI', 'KASHMIR', 24)

         5
PASSENGER_TYPE(5, 'SAGAR', 'JAMMU', 'UP', 21)

         6
PASSENGER_TYPE(6, 'HRISHI', 'PUNE', 'MP', 28)

6 rows selected.
```

```
SQL> insert into PASSENGER_DTLS1 values(1, PASSENGER_TYPE(01,'PRASAD','THANE','UP',23));

1 row created.

SQL> insert into PASSENGER_DTLS1 values(2, PASSENGER_TYPE(02,'SANKET','MUMBAI','MP',24));

1 row created.

SQL> insert into PASSENGER_DTLS1 values(3, PASSENGER_TYPE(03,'ROHIT','PUNE','HR',25));

1 row created.

SQL> insert into PASSENGER_DTLS1 values(4, PASSENGER_TYPE(04,'MOHIT','CHENNAI','KASHMIR',24));

1 row created.

SQL> insert into PASSENGER_DTLS1 values(5, PASSENGER_TYPE(05,'SAGAR','JAMMU','UP',21));

1 row created.

SQL> insert into PASSENGER_DTLS1 values(6, PASSENGER_TYPE(06,'HRISHI','PUNE','MP',28));

1 row created.
```

```
SQL> CREATE TABLE PASSENGER_DTLS1(PID NUMBER(3),DETAIL PASSENGER_TYPE);

Table created.
```

Q3A

```
SQL>    create table sales13(
  2  sid NUMBER,
  3  ssname VARCHAR(10),
  4  salesregion varchar(10)
  5  )
  6  PARTITION BY LIST (salesregion)
  7  (
  8  PARTITION sales_east VALUES ('Mumbai'),
  9  PARTITION sales_west VALUES ('Kolkata'),
 10  PARTITION sales_south VALUES ('Chennai')
 11  ) enable row movement;

Table created.

SQL> insert into sales13 values(1,'prasad','Mumbai');
```

```
SQL> alter table sales13 add partition sales_n
  2            values ('Delhi');

Table altered.

SQL> insert into sales13 values(7,'ben','Delhi');

1 row created.
```

```
SQL>    select * from sales13 PARTITION(sales_n);

       SID SSNAME      SALESREGIO
---------- ---------- ----------
         7 ben        Delhi
         8 sam        Delhi
SQL>    select * from sales13 PARTITION(sales_south);

       SID SSNAME      SALESREGIO
---------- ---------- ----------
         2 chayan     Chennai
         3 rohit      Chennai
SQL>    select * from sales13 PARTITION(sales_n);

       SID SSNAME      SALESREGIO
---------- ---------- ----------
         7 ben        Delhi
         8 sam        Delhi

SQL>    select * from sales13 PARTITION(sales_south);

       SID SSNAME      SALESREGIO
---------- ---------- ----------
         2 chayan     Chennai
         3 rohit      Chennai
```

Q3B

```
SQL> CREATE TABLE Employee (
  2   EMP_NO NUMBER(5),
  3   DEP_NO NUMBER(5),
  4   SALARY NUMBER(10),
  5   COMM NUMBER(10),
  6   JOB VARCHAR2(20));

Table created.

SQL> insert into Employee values (181, 18, 80000, 2000, 'Developer');

1 row created.

SQL> select * from Employee;

    EMP_NO     DEP_NO     SALARY       COMM JOB
---------- ---------- ---------- ---------- --------------------
       181         18      80000       2000 Developer

SQL> SELECT DEP_NO, JOB, count(*), sum (SALARY)
  2   from Employee
  3   group by rollup(DEP_NO, JOB);

    DEP_NO JOB                    COUNT(*) SUM(SALARY)
---------- -------------------- ---------- -----------
        18 Developer                     1       80000
        18                               1       80000
                                         1       80000

SQL> SELECT DEP_NO, JOB, count(*), sum (SALARY)
  2   from Employee
  3   group by cube(DEP_NO, JOB);

    DEP_NO JOB                    COUNT(*) SUM(SALARY)
---------- -------------------- ---------- -----------
                                         1       80000
           Developer                     1       80000
        18                               1       80000
        18 Developer                     1       80000
```