

SET -1

1. Write a menu driven python program using separate user defined functions to Implement following operations in stack using list

> To insert the numbers in the stack

> To delete the numbers from stack.

> To display the status of stack

2. Consider the following table.

TABLE: FLIGHTS

FL_NO	STARTPLACE	ENDPLACE	NO_FLIGHTS	NO_STOPS
IC301	MUMBAI	DELHI	8	0
IC799	BANGALORE	DELHI	2	1
MC101	INDORE	MUMBAI	3	0
IC302	DELHI	MUMBAI	8	0
AM812	KANPUR	BANGALORE	3	1

- A. Write the SQL commands for the following:

- i. To display the contents of the table FLIGHTS in the descending order of FL_NO.
- ii. To increase the number of flights by one whose ENDPLACE is Delhi
- iii. To remove the details of the flights having number value as 0.

- B. Write the output of the following:

- (i) Select ENDPLACE , COUNT(*) from FLIGHTS group by ENDPLACE;
- (ii) Select STARTPLACE from FLIGHTS where NO_STOPS=1;

SET – 2

1. Write a Python program using separate user defined functions to
Implement following operations in stack using dictionary

- > To create a Dictionary for n number of students with name as a key and marks as value
- > To insert the keys (name of the student) of the dictionary into a Stack, where the corresponding value (marks) is greater than 75.
- > To display the content of the stack.

2. Consider the following table:

TABLE: DOCTOR

ID	NAME	DEPT	GENDER	EXPERIENCE
101	John	ENT	M	12
104	Smith	ORTHOPEDIC	M	5
107	George	SKIN	M	10
114	Lara	SKIN	F	3
109	K George	ORTHOPEDIC	F	9

- A. Write the SQL commands for the following:

- i. To display NAME of all doctors who are in “ORTHOPEDIC” having more than 10 years’ experience from the table DOCTOR.
- ii. To display all the information of female Doctor.
- iii. To remove the details of ENT doctors.

- B Write the output of the following:

- (i) Select SUM(EXPERIENCE), GENDER from DOCTOR group by GENDER;
- (ii) Select Distinct DEPT from DOCTOR;

SET – 3

1. Write a Python program using separate user defined functions to Implement following operations in stack using list.

- > To input a list of numbers
- > To traverse the content of the list and insert even numbers into the stack
- > To display the content of the stack.

2. Consider the following table:

Table: Employees

Empid	Firstname	Lastname	Address	City
010	Ravi	Kumar	Raj nagar	GZB
105	Harry	Waltor	Gandhi nagar	GZB
152	Sam	Tones	33 Elm St.	Paris
215	Sarah	Ackerman	440 U.S. 110	Paries
300	Robert	Samuel	9 Fifth Cross	Paries

- A. Write the SQL commands for the following:

- (i) To show firstname, lastname, address of all employees, who all are in GZB city.
- (ii) To display the content of Employees table in descending order of Firstname.
- (iii) To remove the record having Empid as 215 .

- B. Write the output of the following:

- (i) Select count(*), City from Employees group by City;
- (ii) Select Firstname from Employees where Firstname like "S%";

SET – 4

1. Create a MySQL-Python connectivity code to create a table TEACHER to store 5 rows of data. Display the information of those teachers whose salary is greater than 70000. (Create the table in SQL through Python only)

TID	TNAME	TSALARY	TCLASS
S10	SUHANI	30000	10
M12	MAHESH	50000	12
C11	SAHIL	40000	11
E12	ANUJ	80000	12
B12	ARPIT	75000	12

2. Consider the tables PRODUCT and SUPPLIER with following information.

TABLE : PRODUCT

P_ID	Manufacture	Price	SN
TP01	LAK	40	S1
FW05	ABC	45	S2
BS01	ABC	55	S3
SH06	XYZ	120	S4
FW12	XYZ	95	S5

TABLE: SUPPLIER

SN	PNAME	SNAME	QTY	CITY
S1	BREAD	BRITANIA	150	DELHI
S2	CAKE	BRITANIA	250	MUMBAI
S3	COFFEE	NESACAFE	170	MUMBAI
S4	CHOCOLATE	AMUL	380	DELHI
S5	SAUCE	KISSAN	470	JAIPUR

A. Write the SQL commands for the following:

- (i) To display all the information of PRODUCT table in descending order of price.
- (ii) To increase value of quantity by 100 where city is Mumbai.
- (iii) To display Supplier name, Manufacture, Price and product name of the supplier where City is Delhi.

B. Write the output of the following:

- (i) Select COUNT(*), CITY from SUPPLIER group by CITY;
- (ii) Select MAX(PRICE), MIN(PRICE) from PRODUCT;