PRACTICAL LIST FOR CLASS XII

1. WRITE A PROGRAM TO INPUT RECORDS OF N EMPLOYEE USING FOLLOWING STRUCTURE DEFINAITON,CALCULATE BONUS OF ALL EMPLOYEE(5% OF SALARY) AND ALL RECORDS IN TABULAR FORM.

```
struct emp
{int eno;
char ename [30];
float sal,bonus}e[50];
```

2. WAP FOR ARITHMATIC CALUCULATOR USING CLASS AND OBJECT

3. DEFINE A CLASS TOUR HAVING FOLLOWING MEMBERS,AND DECLARE OBJECT OF THIS CLASS TO CALL VARIOUS FUNCTION OF THIS CLASS

PRIVATE : TCode string
integer NoofAdults
integer NoofKids
integer Kilometres
float TotalFare
PUBLIC : EnterTour() – to read the values of datamembers
fare() – to calculate the fare according to the fare chart given :

(Distance)kilometers (fare)

Kilometres < 500	Adults 200Rs	Kids 100Rs
500=<Kilometres<1000	Adults 300Rs	Kids 150Rs
Kilometres >=1000	Adults 500Rs	Kids 250Rs

4. WRITE A PROGRAMME WHICH ACCEPTS AN INTEGER ARRAY AND ITS SIZE AS ARGUMENTS AND ASSIGN THE ELEMENT INTO A 2- D ARRAY OF INTEGERS

5. WAP TO FIND THE AREA OF RECTANGLE, AREA OF TRIANGLE USING HERO'S FORMULA AND AREA OF CIRCLE. (USE FUNCTION OVERLOADING CONCEPT).

6. WAP TO ILLUSTRATE THE TYPE OF MUTIPLE INHERTITANCE:

7. WAP TO ILLUSTRATE THE TYPE OF MULTILEVEL INHERTITANCE:

8. WAP TO THE FOLLOWING Filename-Story.txt

(A) FUNCTION TO COUNT AND DISPLAY THE NUMBER OF ALPHABETS PRESENT IN A TEXT FILE.
(B) FUNCTION TO COUNT THE NUMBER OF WORDS
(C) FUNCTION TO COUNT THE NUMBER OF VOWELS
(D) FUNCTION TO COUNT THE NUMBER OF BLANKS
(E) FUNCTION TO COUNT LINES STARTED WITH A.

9.WAP TO THAT WRITE STUDENT INFORMATION IN STUDENT.DAT FILE AND DISPLAY ONLY THOSE STUDENTS WHO SCORED 75% AND ABOVE.

```
class Student
 {
```

```
char S_Admno[10];  // Admission number of student
char S_Name[30];  // Name of student
int Percentage;  // Marks Percentage of student
public :
void EnterData()
{
gets(S_Admno); gets(S_Name); cin >> Percentage;
}
void DisplayData()
{
cout << setw(12) << S_Admno;
cout << setw(32) << S_Name;
cout << setw(3) << Percentage << endl;
}
int ReturnPercentage() {return Percentage;}
        };
                (G) WAP TO PERFORM ADD,DISPLAY AND UPDATE OBJECT PRODUCT IN A FILE
           PRODUCT.DAT, PROGRAM MUST DISPLAY THE GIVEN MENU

                Main Menu
                1. Add Record;
                2. Display Record
                3. Update Record
                                4. Exit
                 struct PRODUCT
  {
        char Product_Code[10];
        char Product_Description[10];
        int Stock;
                  };
        10.WAP TO SEARCH AN ELEMENNT IN AN ARRAY USING
                (A) LINEAR SEARCH
                (B) BINARY SEARCH
        11 WAP TO SORT AN ARRAY USING
                (A) BUBBLE SORT
                (B) SELECTION SORT
                (C) INSERTION SORT
                (D) MERGE SORT
        12 WAP TO PUSH & POP ELEMENT(S) FROM STACK (ARRAY).
        13 WAP TO INSERT & DELETE ELEMENT(S) FROM QUEUE (ARRAY).
        14 GIVEN IS THE NODE DEFINITION
      struct node
{
        char name[20];
        int age;
        node *link;
};
```

```
class stack
{
        node *top;
        public :
        stack() {  }
        void stackpush(); // Add stack
        void stackpop(); // Delete stack
        void show_Stack(); // Show stack
};
```

IMPLEMENT ABOVE FUNCTIONS OF CLASS STACK, WAP TO PUSH & POP ELEMENT(S) IN DYNAMIC STACK.

15.

```
class Queue
{
        int rear, front;      //the queue pointer
        int que[10];          //the elements
        public:
        void init();
        void add_queue(int); //put new value in que
        void del_queue( ); //get the front value
};
```

IMPLEMENT ABOVE FUNCTIONS OF CLASS QUEUE, WAP TO INSERT & DELETE ELEMENT(S) IN DYNAMIC QUEUE.

16. Write SQL statement for following Based on

Consider the following tables Stationary and Consumer. Write SQL commands for the statement (i) to (iv) and output for SQL queries (v) to (viii):

Table: Stationary

S_ID	StationaryName	Company	Price
DP01	Dot Pen	ABC	10
PL02	Pencil	XYZ	6
ER05	Eraser	XYZ	7
PL01	Pencil	CAM	5
GP02	Gel Pen	ABC	15

Table: Consumer

C_ID	ConsumerName	Address	S_ID
01	Good Learner	Delhi	PL01
06	Write Well	Mumbai	GP02
12	Topper Delhi		DP01
15	Write & Draw	Delhi	PL02
16	Motivation	Banglore	PL01

(i) To display the details of those consumers whose Address is Delhi.

(ii) To display the details of Stationary whose Price is in the range of 8 to 15. (Both Value included)

(iii) To display the ConsumerName, Address from Table Consumer, and Company and Price from

table Stationary, with their corresponding matching S_ID.
(iv) To increase the Price of all stationary by 2.
Find Output of following
(v) SELECT DISTINCT Address FROM Consumer;
(vi) SELECT Company, MAX(Price), MIN(Price), COUNT(*) from Stationary GROUP BY Company;
(vii) SELECT Consumer.ConsumerName, Stationary.StationaryName, Stationary.Price FROM Strionary, Consumer WHERE Consumer.S_ID=Stationary.S_ID;
(viii) Select StationaryName, Price*3 From Stationary;

17 Consider the following tables GARMENT and FABRIC. Write SQL commands for the statements (i) to
(iv) and give outputs for SQL queries (v) to (viii).
Table : GARMENT

GCODE	DESCRIPTION	PRICE	FCODE	READY DATE
10023	PENCIL SKIRT	1150	F03	19–DEC–08
10001	FORMAL SHIRT	1250	F01	12–JAN–08
10012	INFORMAL SHIRT	1550	F02	06–JUN–08
10024	BABY TOP	750	F03	07–APR–07
10090	TULIP SKIRT	850	F02	31–MAR–07
10019	EVENING GOWN	850	F03	06–JUN–08
10009	INFORMAL PANT	1500	F02	20–OCT–08
10007	FORMAL PANT	1350	F01	09–MAR–08
10020	FROCK	850	F04	09–SEP–07
10089	SLACKS	750	F03	20–OCT–08

Table : FABRIC

FCODE	TYPE
F04	POLYSTER
F02	COTTON
F03	SILK
F01	TERELENE

(i) To display GCODE and DESCRIPTION of a each dress in descending order of GCODE.
(ii) To display the details of all the GARMENTs, which have READYDATE in between 08–DEC–07 and 16–JUN–08 (inclusive of both the dates).
(iii) To display the average PRICE of all the GARMENTs, which are made up of FABRIC with FCODE as F03.

(iv) To display FABRIC wise highest and lowest price of GARMENTs from DRESS table. (Display FCODE of each GARMENT along with highest and lowest price)
(v) SELECT SUM (PRICE) FROM GARMENT WHERE FCODE= ‘F01’;
(vi) SELECT DESCRIPTION, TYPE FROM GARMENT, FABRIC WHERE GARMENT.FCODE = FABRIC. FCODE AND GARMENT. PRICE>=1260;
(vii) SELECT MAX (FCODE) FROM FABRIC;
(viii) SELECT COUNT (DISTINCT PRICE) FROM FABRIC;