

1. Write a Program in JAVA that returns the sum of multiples of 3 and 5 between 0 and **limit** (parameter). For example, if limit is 20, it should return the sum of 3, 5, 6, 9, 10, 12, 15, 18, 20.

2. Define a class which represent a book in library. Include following members as data members

Book number, book name, author, publisher, price, No. of copies issued

Member function

- (i) To assign initial value
- (ii) To issue a book after checking its availability
- (iii) To return a book
- (iv) To display book information

3. Define a class batsman in cricket team. Include the following members:
First name, Last name, Runs made, Number of fours, Number of Six

Member function:

- (i) To assign initial value
- (ii) To update runs made
- (iii) To display batsman's information

4. Define a class student with following specifications
members of class student

Registration number integer

Sname Char(20)

Eng, Maths, Science Float

Total Float

Ctotal() Function which calculates total marks

5. Generate the following variant of Fibonacci series

0, -1, 1, -2, **3**, -5, 8, -13, ...

6. Define a class employee with the following specifications;
Private members of class employee :

empno integer

ename String

basic, hra, da float

netpay float

calculate() A method to calculate basic + hra + da with float return type

Public member functions of class employee :

havedata() method to accept values for empno, sname, basic , hra ,da and
invoke

calculate() to calculate netpay

dispdata() function to display all the data members on the screen

7. Define a class **Student** for the following specifications :

Private members of the **Student** are :

roll _ no integer

name string

class _ st string

marks array of integers of size 5

percentage float

calculate that calculates the percentage marks

Public member methods of the **Student** are :

readmarks reads mark and invoke the calculate function

displaymarks prints the data.

7. Define a class TEST in JAVA with following description:

Private Members

- TestCode of type integer
- Description of type string
- NoCandidate of type integer
- CenterReqd (number of centers required) of type integer
- A member method CALCNTR() to calculate and return the number of centers as (NoCandidates/100+1)

Public Members

- A method SCHEDULE() to allow user to enter values for TestCode, Description, NoCandidate & call function CALCNTR() to calculate the number of Centres
- A method DISPTEST() to allow user to view the content of all the data members

8. Define a class which represent a book in library. Include following members as data members

Book number, book name, author, publisher, price, No. of copies issued

Member function

(v) To assign initial value

(vi) To issue a book after checking its availability

(vii) To return a book

(viii) To display book information

9. Define a class batsman in cricket team. Include the following members:

First name, Last name, Runs made, Number of fours, Number of Six

Member function:

- (iv) To assign initial value
- (v) To update runs made
- (vi) To display batsman's information