1- Create a java program to display student details (Name , Roll no , cgpa ,percentage). Percentage should be converted using from cgpa using member function.
Input will be the total number of students followed by student details in the order Name , Roll no , cgpa . Output should be the details of all the students in the order Name , Roll no , cgpa, percentage.

Sample input :
Enter number of students 2
Student Details
Raju M170274cs 7
Sreekrishnan M170232cs 8

Output:
Raju M170274cs 7 65%
Sreekrishnan M170232cs 8 75%

2- Create a java program to find the area of a circle and rectangle using
the concept of inheritance and polymorphism. (parent class shape with area , derived classes triangle and circle both having the function area()).
Input to the program is length and breadth of the rectangle and radius of the circle.
Output should be area of rectangle and area of circle.

Sample input:
Enter l and h of rectangle
10 20
Enter radius of circle
10

Output:
Area of rectangle
200
Area of circle
314

3- Create a C++ program to display petrol's data using multiple inheritance. Petrol inherits properties from fuel and liquid. Liquid has property 'specific gravity' and fuel has property 'price'. Input to the program is specific gravity and price of petrol.

Sample input:
Specific gravity and price of petrol
0.8 65

Output:
0.8 65

4- Create a menu driven program in java to perform the following operations (Apply compile time polymorphism)
1 add two numbers
2 add three numbers
3 -1 * number

(Check sample input for input and output format).

Sample input:
1- Add two numbers
2- Add three numbers
3 - -1 * number
4 exit
Enter option : 1
Enter 2 numbers
10 20
sum is 30

1- Add two numbers
2- Add three numbers
3 - -1 * number
4 exit
Enter option : 2
Enter three numbers
10 20 30
Sum is 60

1- Add two numbers
2- Add three numbers
3 - -1 * number
4 exit
Enter option : 3
Enter number -20
-1* Number is 20

1- Add two numbers
2- Add three numbers
3 - -1 * number
4 exit
Enter option 4

5- create a java program to add and display manager details using hierarchical inheritance
(person(name , age) - emp (name , age,emp_id,salary) - manager (name , age,emp_id,salary, managing_dep,No_of_employees_working_under)).
Input is number of managers followed by manager details int the order name , age, emp_id, salary, managing_dep, No_of_employees_working_under. Output should be the details of all managers in the same order.

Sample input:
Enter number of managers 2
Enter details
raju 23 LT1202 250000 sales 30
sreekrishnan 26 LT1203 350000 production 20

Output:
raju 23 LT1202 250000 sales 30
sreekrishnan 26 LT1203 350000 production 20

6- Create a class employ in java with details name and emp_id where emp_id should not be accessible to outside world but must be accessible in child class (Choose appropriate access specifiers). Store and display employ details using this class.
Input is number of employees followed by employ details in the order name , emp_id. Output is details of all employees in the same order.

Sample input:
Enter number of employees 1
Enter details
raju LT1202

Output:
raju LT1202

7- Create a java program with a class ‘engine’ with properties engine_no and cc and class car with properties engine (with engine_no and cc) , color , price. Take car details from keyboard in the order engine_no ,cc, color , price and output the details of car(Create object of engine in class car).

Sample input :
Enter car details :
14245 350 black 700000

output:
14245 350 black 700000

8- Create a java program with class account with properties account_holder_name,Balance and functions credit(), debit() and two subclass SBI and HDFC which inherit class account and with an extra function calculate_interest(). (for sbi interest is 8% of balance and for HDFC 7% of balamce,Input is the details of two customers , one HDFC and one SBI , in the order account holders name , initial balance ,credited amout , debited amount .Output is balance and interest of both customers).

Sample input :

Enter sbi customer details
Raju 1000 1500 500
Enter HDFC customer details
Sreekrishnan 2000 1500 500

Output:

raju 2000 160
Sreekrishnan 3000 210