LAB #02

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Task 1

```java
class Student {
    String firstname,lastnam,major;      float gpa ,cgpa;      int age ;
    public static void main(String[]args){      Student obj=new Student();      obj.firstname="Asad";
obj.lastnam="Ali";
obj.major="Computer Science";
obj.gpa=3.4f;      obj.cgpa=3.06f;
obj.age=18;
        System.out.println("firstname"+" "+obj.firstname);
        System.out.println("lastname" +" "+obj.lastnam);
        System.out.println("major "   +" "+obj.major);
        System.out.println("Gpa"       +" "+obj.gpa);
        System.out.println("cgpa"      +" "+obj.cgpa);
        System.out.println("Age is"    +" "+obj.age);
}
}
```

Out put

```
PS D:\java programs> java Student
firstname Asad
lastname Ali
major  Computer Science
Gpa 3.4
cgpa 3.06
Age is 18
```

```java
class Student {
    String firstname,lastnam,major;
float gpa ,cgpa;        int age ;
public static void main(String[]args){
Student obj=new Student();
obj.firstname="Asad";
obj.lastnam="Ali";
obj.major="Computer Science";
obj.gpa=3.4f;       obj.cgpa=3.06f;
obj.age=18;
    System.out.println("firstname"+" "+obj.firstname);
    System.out.println("lastname" +" "+obj.lastnam);
    System.out.println("major "   +" "+obj.major);
    System.out.println("Gpa"      +" "+obj.gpa);
    System.out.println("cgpa"     +" "+obj.cgpa);
    System.out.println("Age is"   +" "+obj.age);
     System.out.println("Student 2 data");
Student obj1=new Student();
obj1.firstname="Maqsood";       obj1.lastnam
="Ahmed";      obj1.major="software";
obj1.gpa= 4.0f;      obj1.cgpa=3.56f;
obj1.age=20;
    System.out.println("firstname"+" "+obj1.firstname);
    System.out.println("lastname" +" "+obj1.lastnam);
    System.out.println("major "   +" "+obj1.major);
    System.out.println("Gpa"      +" "+obj1.gpa);
    System.out.println("cgpa"     +" "+obj1.cgpa);
    System.out.println("Age is"   +" "+obj1.age);
}

}
```

Task 3

```
PS D:\java programs> java Student
firstname Asad
lastname Ali
major  Computer Science
Gpa 3.4
cgpa 3.06
Age is 18
Student 2 data
firstname Maqsood
lastname Ahmed
major  software
Gpa 4.0
cgpa 3.56
Age is 20
```

```java
class Book{
    String title ,author
,language;      int page ;
Book(){        title ="java";
author="james Gosle";
language="English";
page=890;
    }
  void printData(){
    System.out.println("tilte is      :"+title);
    System.out.println("athor is      :"+author);
    System.out.println("language is   :"+language);
    System.out.println("page is       :"+page);
  }
  public static void main(String[]args){
Book obj=new Book();
obj.printData();

  }
}
```

Output

```
PS D:\java programs> java Book
tilte is        :java
athor is        :james Gosle
language is   :English
page is         :890
```

Task 4

```java
class Triangle {
float a,b,c,h;
Triangle (){
a=6;        b=4;
c=5;        h=6;
}
    public static void main(String[]args){
        Triangle obj=new Triangle();
        System.out.println("paramter is :"+(obj.a+obj.b+obj.c));
        System.out.println("Area is     :"+(obj.b*obj.h)/2);
    }
}
```

output

```
PS D:\java programs> javac Triangle.java
PS D:\java programs> java Triangle
paramter is :15.0
Area is    :12.0
PS D:\java programs>
```

Task 5

```java
class Triangle {
float a,b,c,h;
    Triangle (float y,float x,float z,float
t){       a=y;         b=x;          c=z;
h=t;      }
    public static void main(String[]args){
Triangle obj=new Triangle(3,4,5,6);
       System.out.println("paramter is :"+(obj.a+obj.b+obj.c));
       System.out.println("Area is     :"+(obj.b*obj.h)/2);
    }
}
```

Output

```
PS D:\java programs> javac Triangle.java
PS D:\java programs> java Triangle
paramter is :12.0
Area is      :12.0
PS D:\java programs>
```

Task 6

```java
import java.util.*;
class Area{
float length,breadth,area;
Area(float a,float b ){
length=a;  breadth=b;      }
float returnArea(){
return length*breadth;
    }
    public static void main(String []args){
Scanner input =new Scanner(System.in);
System.out.println("Enter the breadth");
int a,b;
    a=input.nextInt();
    System.out.print("Enter the length");
b=input.nextInt();          Area    obj=new
Area(a,b);                          float
area=obj.returnArea();
    System.out.print("Area of rectangle is ="+area);
    }
}
```

Output


```
PS D:\java programs> java Area
Enter the breadth
6
Enter the length
4
Area of rectangle is =24.0
```

Task 7

```java
class Employee{
    String name ,adress;
int year,salary;
    Employee(String name ,int year , int salary ,String
address){        this.name=name;          this.year=year;
this.salary=salary;          this.adress=address;

    }           void
printData(){

    System.out.print(name+"\t\t"+year+"\t\t"+salary+"\t\t" +adress);
    }
    public static void main(String args[]){
        Employee obj=new Employee("Mujeeb" ,2020, 3800, "65443wallstret");
        Employee obj2=new Employee("ihsan", 2019, 70000,"78 wall street");
        Employee obj3=new Employee("Ahmed",2023,78900,"890 wall street");
System.out.println("Name\t\t"+"yearofjoining\t"+"salary\t\t"+"Adress" );
obj.printData();        System.out.print("\n");           obj2.printData();
System.out.print("\n");          obj3.printData();
    }
}
```

Output

```
PS D:\java programs> javac Employee.java
PS D:\java programs> java Employee
Name            yearofjoining   salary              Adress
Mujeeb          2020            3800                65443wallstret
ihsan           2019            70000               78 wall street
Ahmed           2023            78900               890 wall street
```