Assignment:

1.
```java
public class Main
{
        public static long factorial(int i)
        {
                return (i < 1) ? 1 : i * factorial(i - 1);
        }


        public static void main(String[] args)
        {
                System.out.println("Author:T.vyjayanthi\nSAP ID:51834774");
                int i = 5;
                System.out.println("The Factorial of " + i + " is " + factorial(i));
        }
}
```

3.
```java
abstract class Bank
{
 abstract int getBalance();
}
class BankA extends Bank
{
```

```java
 int deposit=100;

 int getBalance()

 {

  return deposit;

 }

}

class BankB extends Bank

{

 int deposit=150;

 int getBalance()

 {

  return deposit;

 }

}

class BankC extends Bank

{

 int deposit=200;

 int getBalance()

 {

  return deposit;

 }

}

class Main

{

 public static void main(String args[])
```

```java
{
System.out.println("Author:T.vyjayanthi\nSAP ID:51834774");

//object for Bank A

BankA i=new BankA();

System.out.println("Balance in Bank A: "+i.getBalance());


//object for Bank B

BankB j=new BankB();

System.out.println("Balance in Bank B: "+j.getBalance());


//object for Bank C

BankC k=new BankC();

System.out.println("Balance in Bank C: "+k.getBalance());


}
}
```

5.import java.util.Scanner;

```java
public class Main
{
    int Id;

    String Name;

    int Age;
```

```java
long Salary;

void GetData()        // Defining GetData()
{

    Scanner sc = new Scanner(System.in);

    System.out.print("\n\tEnter Employee Id : ");
    Id = Integer.parseInt(sc.nextLine());

    System.out.print("\n\tEnter Employee Name : ");
    Name = sc.nextLine();

    System.out.print("\n\tEnter Employee Age : ");
    Age = Integer.parseInt(sc.nextLine());

    System.out.print("\n\tEnter Employee Salary : ");
    Salary = Integer.parseInt(sc.nextLine());

}

void PutData()        // Defining PutData()
{
    System.out.print("\n\t" + Id + "\t" +Name + "\t" +Age + "\t" +Salary);
}
```

```java
public static void main(String args[])
{

    System.out.println("Author: T.vyjayanthi\nSAP ID:519834774");

    Main[] M = new Main[10];

    int i;

    for(i=0;i<10;i++)
        M[i] =  new Main();  // Allocating memory to each object

    for(i=0;i<10;i++)
    {
        System.out.print("\nEnter details of "+ (i+1) +" Employee\n");
        M[i].GetData();
    }

    System.out.print("\nDetails of Employees\n");
    for(i=0;i<10;i++)
        M[i].PutData();

}
}
```