1.
```java
import java.util.Scanner;
abstract class shape
{
int a,b;
abstract void printArea();
}
class Rectangle extends shape
{
void print Area()
{
System.out.Println ("Area of Rectangle ="+(a*b));
}
}
class Triangle extends shape
{
void PrintArea()
{
System.out. Println ("Area of Triangle ="+(0.5*a*b));
}
}
class circle extends shape
{
void printArea()
{
System.out. Println ("Area of Circle ="+(3.142*a*b));
}
}
```

```
class Shapemain
{
Public static void main (string args[])
{
Scanner sc=new Scanner(system.in);
Rectangle r = new Rectangle();
Triangle t = new Triangle();
Circle c = new circle();
```

```java
System.out.println("Enter length and breadth:");
r.a = sc.nextInt();
r.b = sc.nextInt();
r.print Area();
System.out.println("Enter height and base:");
t.a = sc.nextInt();
t.b = sc.nextInt();
t.print Area();
System.out.println("Enter radius:");
c.a = sc.nextInt();
c.print Area();
}
}
```

2.

```java
import java.util.Scanner;
class account
{
private string name;
private long account_number;
private int account_type;
double balance;
void get_data()
{
Scanner ss = new Scanner(System.in)
System.out.println("Enter the name")
name = ss.next();
system.out.println("enter the account_number");
account_number = ss.nextLong();
system.out.println("choose the account type");
System.out.println("1. Savings account");
System.out.println("2. current account");
```

```java
account_type=ss.nextInt();
}
int return_account_type()
{
return account_type;
}
}
class savings extends account
{
Scanner ss= new scanner (system.in);
double amount;
void get_sav_balance()
{
System.out.Println("Enter the amount to be placed in your
savings account");
amount = ss.next Double();
balance += amount;
}
void display_sav_blnce()
{
system.out.Println("balance ="+balance);
}
void compute_sav_intrest()
{
System.Out.Println("Interest of 5% shall be added to your
balance");
balance= balance +(.05 * balance);
}
void withdrawl_sav()
{
System.out.Println("Enter the amount to be withdrawn");
amount= ss.next Double();
```

```java
        balance = balance - amount;
    }
}
class current extends account
{
    scanner ss = new scanner(system.in);
    double amount;
    final double min-balance = 5000;
    void get_cur_balance()
    {
        System.out.Println("Enter the amount to be placed in your
        account");
        amount = ss.nextDouble();
        balance+ = amount;
    }
    void display_cur_blnce()
    {
        system.out.println("balance:"+balance);
    }
    void compute_cur_service_charges()
    {
        if(balance< min_balance)
        {
            system.out.Println("service tax of rs.500 shall be levied");
            balance= balance-500;
        }
        else
        {
```

```java
system.out.Println("minimum balance is maintained");
}

}
void withdrawl_cur()

{
System.out.println("Enter the amount tobe withdrawn");

amount=ss next Double();
balance= balance- amount;
}

}
class bankmain

{
Public static void main (string args[])

{
    int type;
    System.out.Println ("Enter the bank details");

    account acc= new account ();
    acc.get_data();
    type= acc.return_account_type ();
    if(type==1)

    {
    System.out.Println ("SAVINGS ACCOUNT");

    Savings sav= new savings();
    Sav.get_sav_balance();
    Sav.display_sav_blnce();
    Sav.compute_sav_interest();
    sav.display_sav_blnce();
    Sav.withdrawl_sav();
    Sav.display_sav_blnce();
    }
```

```
if (type==2)
{
    System.out.Peintln("CURRENT ACCOUNT");
    current cur = new current();
    cur.get_cur.balance();
    cur.disPlay_cur_balance();
    cur.compute_cur_service_charges();
    cur.display_cur_blnce();
    cur.withdrawl_cur();
    cur.display_cur_blnce();
}
}
}
```