

QUESTION 1:

```
import java.util.Scanner;
```

```
class q1{
```

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

```
        Scanner myin=new Scanner(System.in);
```

```
        System.out.println("enter the size of matrix");
```

```
        int n,m;
```

```
        n=myin.nextInt();
```

```
        m=myin.nextInt();
```

```
        int[][] a=new int[n][m];
```

```
        System.out.println("enter the elements of first matrix");
```

```
        for(int i=0;i<n;i++){
```

```
            for(int j=0;j<m;j++){
```

```
                a[i][j]=myin.nextInt();
```

```
            }
```

```
        }
```

```
        System.out.println("enter the size of second matrix");
```

```
        int o,p;
```

```
        o=myin.nextInt();
```

```
        p=myin.nextInt();
```

```
        int[][] b=new int [o][p];
```

```
        System.out.println("enter the elements of second matrix");
```

```
        for(int i=0;i<o;i++){
```

```
            for(int j=0;j<p;j++){
```

```
                b[i][j]=myin.nextInt();
```

```
            }
```

```
        }
```

```
        if(m!=o) System.out.println("cannot multiply");
```

```
        else{
```

```

int[][] c=new int[n][p];

for(int i=0;i<n;i++){

    for(int j=0;j<p;j++){

        int sum=0;

        for(int k=0;k<o;k++){

            sum+=a[i][k]*b[k][j];

        }

        c[i][j]=sum;

    }

}

for(int i=0;i<n;i++){

    for(int j=0;j<p;j++){

        System.out.print(c[i][j]+" ");

    }

    System.out.println("");

}

}

myin.close();

}

}

```

```

PS D:\oops in java\21082023> javac q1.java
PS D:\oops in java\21082023> java q1.java
enter the size of matrix
2
3
enter the elements of first matrix
1
2
3
4
5
6
enter the size of second matrix
3
2
enter the elements of second matrix
2
3
4
5
6
7
28 34
64 79

```

Question 2:

```

class students {
    String name="Unknown";
    students(String n){
        name=n;
        System.out.println(name);
    }
    students(){
        System.out.println(name);
    }
    public static void main(String[] args){
        students s1= new students();
        students s2=new students("challa");
        students s3= new students();
        students s4=new students("ram");
        students s5=new students();
    }
}

```

```

PS D:\oops in java\21082023> javac q2.java
PS D:\oops in java\21082023> java q2.java
Unknown
challa
Unknown
ram
Unknown

```

Question 3:

```

public class q3 {
    q3(int len,int bred){
        System.out.println("Area of rectangle= "+len*bred);
    }
    q3(float height,float base){
        System.out.println("Area of triangle= "+height*base/2);
    }
    q3(float radius){

```

```

        System.out.println("Area of circle= "+3.14*radius*radius);
    }
    public static void main(String[] args){
        q3 rec1=new q3(5,8);
        q3 tri1=new q3 (8.1f,4.2f);
        q3 cric1= new q3(4);
        q3 rec2= new q3(6,7);

    }
}

```

```

PS D:\oops in java\21082023> javac q3.java
PS D:\oops in java\21082023> java q3.java
Area of rectangle= 40
Area of triangle= 17.01
Area of circle= 50.24
Area of rectangle= 42

```

Question 4:

```

class cars {
    String model;
    int price;
    cars(String mo,int pr){
        this.model=mo;
        this.price=pr;
    }
    String getModel(){
        return this.model;
    }
    int getprice(){
        return this.price;
    }
    public static void main(String args[]){
        cars c1=new cars("BMW",1000000);
        String mod=c1.getModel();
    }
}

```

```
int pri=c1.getprice();  
System.out.println(mod+" "+pri);  
cars c2=new cars("mercedes",1099999);  
mod=c2.getModel();  
pri=c2.getprice();  
System.out.println(mod+" "+pri);  
cars c3=new cars("xuv",1111111);  
mod=c3.getModel();  
pri=c3.getprice();  
System.out.println(mod+" "+pri);  
}  
}
```

```
PS D:\oops in java\21082023> javac q4.java  
PS D:\oops in java\21082023> java q4.java  
BMW 1000000  
mercedes 1099999  
xuv 1111111
```