

**1**

```
import java.util.Scanner;

public class Main
{
    public static void main(String[] args)
    {
        Scanner obj = new Scanner(System.in);

        System.out.println("code:");
        int code = obj.nextInt();
        if(code==1){
            Scanner a = new Scanner(System.in);
            System.out.println("x:");
            float c=a.nextFloat();

            Scanner b = new Scanner(System.in);
            System.out.println("y:");
            float d=b.nextFloat();

            float sum;
            sum=c+d;

            System.out.println("Sum:"+sum);
        }
        else{
            System.out.println("Sum:0.00");
        }
    }
}
```

**2**

```
import java.util.*;
```

```

import java.lang.*;
import java.io.*;

class Main
{
    public static void main (String[] args)
    {
        Scanner sc=new Scanner(System.in);

        System.out.println("Quantity Purchased:");
        int QuantityPurchased=sc.nextInt();
        System.out.println("Rate per item:");
        float Rateperitem=sc.nextFloat();
        float Totalexpense=QuantityPurchased*Rateperitem;
        if(QuantityPurchased>1000)
        {
            Totalexpense=Totalexpense-(Totalexpense/10);
            System.out.println("Total expense:" +Totalexpense);
        }
        else
        {
            System.out.println("Total expense:" +Totalexpense);
        }

    }
}

```

### 3

```

import java.util.Scanner;

class Main {

```

```

public static void main(String[] args) {

    int currentNumber;

    Scanner sc=new Scanner(System.in);

    System.out.println("currentNumber:");

    currentNumber=sc.nextInt();

    if (currentNumber % 2 == 1)

        currentNumber = currentNumber*3+1;

    else

        currentNumber = currentNumber/2;

    System.out.println("currentNumber: " +currentNumber );
}
}

```

#### 4

```

import java.util.Scanner;

class Main {

    public int teenSum(int num1, int num2) {

        int sum = num1+num2;

        if ((num1 >= 13 && num1 <= 19) || (num2 >= 13 && num2 <= 19))

            return 19;

        else

            return sum;

    }
}

```

```

public static void main(String[] args) {

    int a,b;

    Scanner sc=new Scanner(System.in);

    System.out.println("a:");
    a=sc.nextInt();

    System.out.println("b:");
    b=sc.nextInt();


    Main obj = new Main();

    int result = obj.teenSum(a,b);

    System.out.println("teenSum: " + result);
}
}

```

## 5

```

import java.util.Scanner;

public class Main
{
    public static void main(String args[]){

        Scanner Sc = new Scanner(System.in);

        int cost;

        System.out.print("Enter the cost of the mobile : ");

        cost = Sc.nextInt();

        if(cost <= 13000)

        {

            System.out.print("Mobile chosen is within the budget");

        }

    }
}

```

```

else
{
    System.out.print("Mobile chosen is beyond the budget");

}

}

}

```

## 6

```

import java.util.Scanner;

public class Main
{
    public static void main (String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter the car no:");
        int num=sc.nextInt();
        if(num<1000 || num>9999)
        {
            System.out.println(num+" is not a valid car number");
        }
        else
        {int sum=0;
            while(num>0)
            {
                sum+=num%10;
                num/=10;
            }
            if(sum%3==0 || sum%5==0 || sum%7==0)

```

```

    {
        System.out.println("Lucky Number");
    }
    else
    {
        System.out.println("Sorry its not my lucky number");
    }
}
}
}

```

## 7

```

import java.util.Scanner;

public class Main
{
    public static void main(String[] args) {

        Scanner sc =new Scanner(System.in);
        System.out.println("Enter the color:");
        String color=sc.next();
        sc.nextLine();

        switch(color) {
            case "green" :
                System.out.println("Go");
                break;

            case "red" :
                System.out.println("Stop");
                break;

```

```

        case "yellow" :

            System.out.println("proceed with caution");

            break;

        default:

            System.out.println("prepare to go");

            break;

        }

    }
}

```

## 8

```

import java.util.Scanner;

public class Season
{
    public static void main (String[] args) {
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter the month:");

        int mon=sc.nextInt();

        if(mon>12 || mon<1)
        {
            System.out.println("Invalid month");
        }

        else if(mon>=3&&mon<=5)
        {
            System.out.println("Season:Spring");
        }

        else if(mon>=6&&mon<=8)
        {
            System.out.println("Season:Summer");
        }
    }
}

```

```

    }
    else if(mon>=9&&mon<=11)
    {
        System.out.println("Season:Autumn");
    }
    else if(mon==12 || mon==1 || mon==2)
    {
        System.out.println("Season:Winter");
    }
}
}

```

## 9

```

import java.util.Scanner;

public class Main
{
    public static void main (String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.println("number:");
        int num=sc.nextInt();
        if(num==9 || num==10)
        {
            System.out.println("excellent");
        }
        else if(num==7 || num==8)
        {
            System.out.println("notable");
        }
        else if(num==6)
        {

```



```
        System.out.println("good");
    }
    else if(num==5)
    {
        System.out.println("improved");
    }
    else if(num==0 || num==1 || num==2 || num==3 || num==4 )
    {
        System.out.println("fail");
    }

    else
    {
        System.out.println("invalid");
    }
}
```