

1.

```

1 package Lab3;
2 import java.util.Scanner;
3 public class MaxMinMean {
4     public static void main(String[] args){
5         int old,num,max=0,min=0;
6         double avg=0,sum=0.0;
7         Scanner sc = new Scanner(System.in);
8         System.out.print("Please enter number of people : ");
9         num = sc.nextInt();
10        System.out.print("Age of no 1 = ");
11        old = sc.nextInt();
12        max = old;
13        min = old;
14        sum = sum+old;
15        for (int i=2; i<=num; i++) {
16            System.out.print("Age of no "+i+" = ");
17            old = sc.nextInt();
18            sum = sum+old;
19            if (old>max) {
20                max=old;
21            }
22            else if (old<min) {
23                min=old;
24            }
25        }
26        avg = sum/num;
27        System.out.println("Maximum : "+max);
28        System.out.println("Minimum : "+min);
29        System.out.println("Summery : +(int)sum);
30        System.out.println("Average : "+avg);
31    }
32 }
33

```

Console: <terminated> MaxMinMean [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86\_64\_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 d.u. 2564 17:47:25 - 17:47:33)

```

1 package Lab3;
2 import java.util.Scanner;
3 public class MaxMinMean {
4     public static void main(String[] args){
5         int old,num,max=0,min=0;
6         double avg=0,sum=0.0;
7         Scanner sc = new Scanner(System.in);
8         System.out.print("Please enter number of people : ");
9         num = sc.nextInt();
10        System.out.print("Age of no 1 = ");
11        old = sc.nextInt();
12        max = old;
13        min = old;
14        sum = sum+old;
15        for (int i=2; i<=num; i++) {
16            System.out.print("Age of no "+i+" = ");
17            old = sc.nextInt();
18            sum = sum+old;
19            if (old>max) {
20                max=old;
21            }
22            else if (old<min) {
23                min=old;
24            }
25        }
26        avg = sum/num;
27        System.out.println("Maximum : "+max);
28        System.out.println("Minimum : "+min);
29        System.out.println("Summery : +(int)sum);
30        System.out.println("Average : "+avg);
31    }
32 }
33

```

Console: <terminated> MaxMinMean [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86\_64\_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 d.u. 2564 17:50:12 - 17:50:47)

Please enter number of people : 3  
Age of no 1 = 15  
Age of no 2 = 16  
Age of no 3 = 14  
Maximum :16  
Minimum :14  
Summery :45  
Average :15.0

The screenshot shows the Eclipse IDE with the file `MaxMinMean.java` open. The code is as follows:

```

1 package Lab3;
2 import java.util.Scanner;
3 public class MaxMinMean {
4     public static void main(String[] args){
5         int old,num,max=0,min=0;
6         double avg=0,sum=0.0;
7         Scanner sc = new Scanner(System.in);
8         System.out.print("Please enter number of people : ");
9         num = sc.nextInt();
10        System.out.print("Age of no 1 = ");
11        old = sc.nextInt();
12        max = old;
13        min = old;
14        sum = sum+old;
15        for (int i=2; i<=num; i++) {
16            System.out.print("Age of no "+i+" = ");
17            old = sc.nextInt();
18            sum = sum+old;
19            if (old>max) {
20                max=old;
21            }
22            else if (old<min) {
23                min=old;
24            }
25        }
26    }
27 }

```

The console output shows the program execution with the following data:

```

Please enter number of people : 4
Age of no 1 = 15
Age of no 2 = 16
Age of no 3 = 14
Age of no 4 = 14
Maximum :16
Minimum :14
Summery :59
Average :14.75

```

2.

The screenshot shows the Eclipse IDE with the file `NPerLine.java` open. The code is as follows:

```

1 package Lab3;
2 import java.util.Scanner;
3 public class NPerLine {
4     public static void main(String[] args) {
5         int num1,num2,col;
6         Scanner sc = new Scanner(System.in);
7         System.out.print("Enter n1 : ");
8         num1 = sc.nextInt();
9         System.out.print("Enter n2 : ");
10        num2 = sc.nextInt();
11        System.out.print("Enter column : ");
12        col = sc.nextInt();
13        for (int i=num1; i<=num2; i++) {
14            System.out.print(" "+i);
15            if (i%col==4) {
16                System.out.println();
17            }
18        }
19    }
20 }
21

```

The console output shows the program execution with the following data:

```

Enter n1 : 5
Enter n2 : 16
Enter column : 5
5 6 7 8 9
10 11 12 13 14
15 16

```

The screenshot shows the Eclipse IDE with the file `NPerLine.java` open. The code is as follows:

```

1 package Lab3;
2 import java.util.Scanner;
3 public class NPerLine {
4     public static void main(String[] args) {
5         int num1,num2,col;
6         Scanner sc = new Scanner(System.in);
7         System.out.print("Enter n1 : ");
8         num1 = sc.nextInt();
9         System.out.print("Enter n2 : ");
10        num2 = sc.nextInt();
11        System.out.print("Enter colum : ");
12        col = sc.nextInt();
13        for (int i=num1;i<=num2;i++) {
14            System.out.print(" "+i);
15            if (i%col==4) {
16                System.out.println();
17            }
18        }
19    }
20 }
21

```

The console output shows the execution results:

```

<terminated> NPerLine [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 ร.ร. 2564 18:19:37 - 18:19:50)
Enter n1 : 5
Enter n2 : 25
Enter colum : 10
5 6 7 8 9 10 11 12 13 14
15 16 17 18 19 20 21 22 23 24
25

```

3.

The screenshot shows the Eclipse IDE with the file `SumOfMoney.java` open. The code is as follows:

```

1 package Lab3;
2 import java.util.Scanner;
3 public class SumOfMoney {
4     public static void main(String[] args) {
5         int numcon=0,round,sum=0;
6         double num;
7         Scanner sc = new Scanner(System.in);
8         System.out.print("Enter numbers : ");
9         round = sc.nextInt();
10        for (int i=1; i<=round; i++) {
11            num = sc.nextDouble();
12            if (num<=0) {
13                numcon = 0;
14            }
15            else if ((num*10)%10<5) {
16                numcon = (int)num;
17                System.out.println("nearest Integer "+numcon);
18            }
19            else if ((num*10)%10>=5) {
20                numcon = (int)num;
21                numcon = numcon+1;
22                System.out.println("nearest Integer "+numcon);
23            }
24            sum = sum+numcon;
25        }
26        System.out.print("Summary is "+sum);
27    }
28 }
29
30

```

The console output shows the execution results:

```

<terminated> SumOfMoney [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 ร.ร. 2564 17:55:24 - 17:56:09)
Enter numbers : 5
3.1
nearest Integer 3

```

The screenshot shows the Eclipse IDE with the file `SumOfMoney.java` open. The code defines a class `SumOfMoney` with a `main` method that takes command-line arguments. It uses a `Scanner` to read input and a `for` loop to process a series of numbers. The logic for each number is as follows:

- If the number is 0, `numcon` is set to 0.
- If the number is between 1 and 5 (inclusive), `numcon` is set to the number.
- If the number is greater than 5, `numcon` is set to the number plus 1.

The console output shows the results of the program execution:

```
<terminated> SumOfMoney [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 B.u. 2564 17:55:24 - 17:56:09)
Enter numbers : 5
3.1
nearest Integer 3
4.5
nearest Integer 5
3.8
nearest Integer 4
1.2
nearest Integer 1
0
Summary is 13
```

The screenshot shows the Eclipse IDE with the file `SumOfMoney.java` open. The code is identical to the previous one, but the console output shows a different set of inputs and results:

```
<terminated> SumOfMoney [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 B.u. 2564 17:57:10 - 17:57:33)
Enter numbers : 3
9.71
nearest Integer 10
4.25555
nearest Integer 4
-5
Summary is 14
```

4.

```

1 package Lab3;
2 import java.util.Scanner;
3 public class LoopQueenContest {
4     @SuppressWarnings("unused")
5     public static void main(String[] args) {
6         //variable
7         int i=1,tallestnum=0;
8         char unit,choice;
9         double feet,inch,cm1=0,tallest=0;
10        Scanner sc = new Scanner(System.in);
11
12        //input
13        //No.1
14        do{
15            System.out.print("No. "+i+" Enter height: ");
16            unit = sc.next().charAt(0);
17            if(unit=='f'){
18                feet = sc.nextDouble();
19                inch = sc.nextDouble();
20                cm1 = ((feet*12)+inch)*2.54;
21            }
22            else if(unit=='c'){
23                cm1 = sc.nextDouble();
24            }
25            if (cm1>tallest) {
26                tallest=cm1;
27                tallestnum=i;
28            }
29            System.out.println("No. "+i+" is "+cm1+"cm.");
30            i++;
31            System.out.print("Do you want to continue [y/n] : ");
32            choice = sc.next().charAt(0);
33            while(choice=='y');
34            System.out.print("No. "+tallestnum+" is tallest");
35            System.out.println("Bye Bye!!!");
36        }
37    }
38 }

```

```

1 package Lab3;
2 import java.util.Scanner;
3 public class LoopQueenContest {
4     @SuppressWarnings("unused")
5     public static void main(String[] args) {
6         //variable
7         int i=1,tallestnum=0;
8         char unit,choice;
9         double feet,inch,cm1=0,tallest=0;
10        Scanner sc = new Scanner(System.in);
11
12        //input
13        //No.1
14        do{
15            System.out.print("No. "+i+" Enter height: ");
16            unit = sc.next().charAt(0);
17            if(unit=='f'){
18                feet = sc.nextDouble();
19                inch = sc.nextDouble();
20                cm1 = ((feet*12)+inch)*2.54;
21            }
22            else if(unit=='c'){
23                cm1 = sc.nextDouble();
24            }
25            if (cm1>tallest) {
26                tallest=cm1;
27                tallestnum=i;
28            }
29            System.out.println("No. "+i+" is "+cm1+"cm.");
30            i++;
31            System.out.print("Do you want to continue [y/n] : ");
32            choice = sc.next().charAt(0);
33            while(choice=='y');
34            System.out.print("No. "+tallestnum+" is tallest");
35            System.out.println("Bye Bye!!!");
36        }
37    }
38 }

```

Console

```

<terminated> LoopQueenContest [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 f.m. 2564 18:00:23 - 18:00:38)
No. 1 Enter height: f 5 4
No. 1 is 162.56cm.
Do you want to continue [y/n] : y
No. 2 Enter height: c 175
No. 2 is 175.0cm.
Do you want to continue [y/n] : n
No. 2 is tallest
Bye Bye!!!

```

```

1  package Lab3;
2  import java.util.Scanner;
3  public class LoopQueenContest {
4      public static void main(String[] args) {
5          Scanner sc = new Scanner(System.in);
6          //input
7          //No.1
8          do {
9              System.out.print("No. "+i+" Enter height: ");
10             unit = sc.next().charAt(0);
11             if(unit=='f') {
12                 feet = sc.nextDouble();
13                 inch = sc.nextDouble();
14                 cm1 = ((feet*12)+inch)*2.54;
15             }
16             else if(unit=='c'){
17                 cm1 = sc.nextDouble();
18             }
19             if (cm1>tallest) {
20                 tallest=cm1;
21                 tallestnum=i;
22             }
23             System.out.println("No. "+tallestnum+" is "+cm1+"cm.");
24             System.out.print("Do you want to continue [y/n] : ");
25             choice = sc.next().charAt(0);
26             while(choice=='y');
27             System.out.println("No. "+tallestnum+" is tallest");
28         } while(choice=='y');
29     }
30 }

```

Console:

```

terminated> LoopQueenContest [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 0.0. 2564 18:03:09 - 18:03:19)
No. 1 Enter height: c 175
No. 1 is 175.0cm.
Do you want to continue [y/n] : y
No. 2 Enter height: f 5 4
No. 1 is 162.56cm.
Do you want to continue [y/n] : n
No. 1 is tallest
Bye Bye!!!

```

5.

```

1  package Lab3;
2  import java.util.Scanner;
3  public class NumberGuess {
4      public static void main(String[] args) {
5          int secretNumber = (int)(Math.random()*100);
6          int num, trials=0;
7          Scanner sc = new Scanner(System.in);
8          System.out.print("Key in your guess number : ");
9          do {
10             trials++;
11             num=sc.nextInt();
12             if(num>0 && num<99) {
13                 if(num==secretNumber) {
14                     System.out.print("Congratulation! "+num+" is secret number");
15                     System.out.print(" You got in "+trials+" trials");
16                 }
17                 else if(num>secretNumber){
18                     System.out.print("Try lower : ");
19                 }
20                 else if(num<secretNumber){
21                     System.out.print("Try higher : ");
22                 }
23             }
24             else {
25                 System.out.print("Please enter a number between 0-99!!!!");
26             }
27             while(num!=secretNumber);
28         } while(true);
29     }
30 }

```

Console:

```

terminated> LoopQueenContest [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 0.0. 2564 18:03:09 - 18:03:19)

```

The screenshot shows the Eclipse IDE with the 'NumberGuess.java' file open. The code is as follows:

```

1 package Lab3;
2 import java.util.Scanner;
3 public class NumberGuess {
4     public static void main(String[] args) {
5         int secretNumber = (int)(Math.random()*100);
6         int num, trials=0;
7         Scanner sc = new Scanner(System.in);
8         System.out.print("Key in your guess number : ");
9         do {
10             trials++;
11             num=sc.nextInt();
12             if(num>0 && num<=99) {
13                 if(num==secretNumber) {
14                     System.out.print("Congratulation!"+num+"is secret number");
15                     System.out.print(" You got in "+trials+" trials");
16                 }
17                 else if(num>secretNumber){
18                     System.out.print("Try lower : ");
19                 }
20                 else if(num<secretNumber){
21                     System.out.print("Try higher : ");
22                 }
23             }
24             else {
25                 System.out.print("Please enter a number between 0-99!!!");
26             }
27         } while (num != secretNumber);
28     }
29 }

```

The console output shows the following sequence of events:

```

<terminated> NumberGuess [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 มิ.ย. 2564 18:04:40 - 18:04:57)
Key in your guess number : 50
Try higher : 60
Try higher : 70
Try higher : 80
Try higher : 90
Try higher : 95
Try higher : 96
Congratulation!96is secret number You got in 7 trials

```

6.

The screenshot shows the Eclipse IDE with the 'Multiplication.java' file open. The code is as follows:

```

1 package Lab3;
2 import java.util.Scanner;
3 public class Multiplication {
4     public static void main(String[] args) {
5         int num;
6         char choice='y';
7         Scanner sc = new Scanner(System.in);
8         while (choice == 'y') {
9             System.out.print("Number [2 to 12] : ");
10            num = sc.nextInt();
11            while (num<2 || num>12) {
12                System.out.print("Invalid data, please try again.");
13                System.out.print("Number [2 to 12] : ");
14                num = sc.nextInt();
15            }
16            for(int i=1; i<=12; i++) {
17                System.out.println(num+" x "+i+" = "+(num*i));
18            }
19            System.out.print("Do you want to continue [y/n]:");
20            choice = sc.next().charAt(0);
21        }
22        System.out.print("Bye Bye!!");
23    }
24 }
25 }

```

The console output shows the following sequence of events:

```

<terminated> NPerLine [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 มิ.ย. 2564 18:19:37 - 18:19:50)

```

Javacomp - JavaProject/src/Lab3/Multiplication.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

MaxMinMean.java NPerLine.java SumOfMoney.java LoopQueenContest.java NumberGuess.java Multiplication.java

```

1 package Lab3;
2 import java.util.Scanner;
3 public class Multiplication {

```

Console

```

<terminated> Multiplication [Java Application] C:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_15.0.1.v20201027-0507\jre\bin\javaw.exe (30 d.a. 2564 18:05:36 - 18:06:05)
Number [2 to 12] : 20
Invalid data, please try again.Number [2 to 12] : 12
12 x 1 = 12
12 x 2 = 24
12 x 3 = 36
12 x 4 = 48
12 x 5 = 60
12 x 6 = 72
12 x 7 = 84
12 x 8 = 96
12 x 9 = 108
12 x 10 = 120
12 x 11 = 132
12 x 12 = 144
Do you want to continue [y/n]:y
Number [2 to 12] : 2
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20
2 x 11 = 22
2 x 12 = 24
Do you want to continue [y/n]:n
Bye Bye!!

```

Windows taskbar: 33°C, 18:06, 30/6/2564