Control Statement Problem Sloving Part 02

1. Write a java to Check the Digit.

```
Input:
package begginnerjava;
import java.util.Scanner;
public class digitspelling {
  public static void main(String [] args){
   Scanner input = new Scanner(System.in);
   int digit;
   System.out.print("Enter any digit : ");
   digit = input.nextInt();
   switch(digit){
      case 0:
      System.out.println("Zero");
      break;
      case 1:
      System.out.println("One");
      break;
      case 2:
      System.out.println("Two);
      break;
      case 3:
      System.out.println("Three");
      break;
      case 4:
      System.out.println("Four");
      break;
      case 5:
      System.out.println("Five");
      break;
```

```
default:
    System.out.println("Not a digit");
}
```

}

```
:Output-Begginnerjava (run)

run:
Enter any digit: 1
One
BUILD SUCCESSFUL (total time: 1 second)
```

2. Write a Java Programme to find the number large . Input:

```
package begginnerjava;
import java.util.Scanner;
public class conditionaloperator {
  public static void main(String [] args){
    Scanner input = new Scanner(System.in);
    int num1,num2,large;
    System.out.print("Enter 2 number : ");
```

```
num1=input.nextInt();
num2=input.nextInt();
large = (num1>num2) ? num1 : num2;
System.out.println("Large : "+large);
}
```

3. Write a java Programme to checch the Bitwise Operator. Input:

```
package begginnerjava;
import java.util.Scanner;
public class BitwiseOperator {
  public static void main(String [] args){
    int a = 32;
    int b = 23;
    int c;
    c = a<<3;
    System.out.println("a<<3 = " +c);
    c = a>>3;
```

```
System.out.println("a>>3 = " +c);
}
```

```
Begginnerjava (run) × Begginnerjava (run) × Begginnerjava (run) #2 × Begginnerjava

run:
a<<3 = 256
a>>3 = 4
BUILD SUCCESSFUL (total time: 1 second)
```

4. Write a Java Programme to find math class operator.
Input:
package begginnerjava;

public class math {

 public static void main(String[] args){

 int x = 2;
 int y = 4;

 int max = (Math.max(x,y));
 System.out.println("Maximum : "+max);

 int min = (Math.min(x,y));
 System.out.println("Minimum : "+min);

```
int absolute = Math.abs(y);
    System.out.println("Absolute vaule of y: "+absolute);
     double power = Math.pow(x,y);
    System.out.println("x to the Power y: "+power);
    int round = Math.round(8.4f);
   System.out.println("Round of 8.4 : "+round);
    double pi = Math.PI;
     System.out.println("pi : "+pi);
  }
}
Output:
 Minimum: 2
 Absolute vaule of y : 4
 x to the Power y: 16.0
 Round of 8.4 : 8
 pi : 3.141592653589793
 BUILD SUCCESSFUL (total time: 0 seconds)
 5. Write a java programee to find the name length using for loop.
Input:
package begginnerjava;
public class forloop {
  public static void main(String [] args){
```

```
for(int i=1;i<=10;i++){
      System.out.println("Chennai Super Kings");
    }
  }
}
Output:
run:
Chennai Super Kings
BUILD SUCCESSFUL (total time: 0 seconds)
     Write a Java Programme to find 1 to 100 number using for loop.
Input:
package begginnerjava;
public class forloop {
  public static void main(String [] args){
    for(int i=2;i<=100; I=I+2){
      System.out.println(i);
    }
  }
```

```
}
```

```
4
6
8
10
12
14
16
18
20
22
24
26
28
30
30
32
34
36
38
40
40
42
44
46
48
50
50
52
54
56
58
60
```

7. Write a Java Programme to find 1 to 100 number using while loop. Input:

```
package begginnerjava;

public class whileloop {
   public static void main(String [] args){
     int i=1;
     while (i<=100) {
        System.out.println(i);
        i=i+2;
     }
}</pre>
```

```
Output:
```

8. Write a Java Programme to find 1 to 100 number using while loop. Input:

```
package begginnerjava;

public class dowhileloop {
  public static void main(String [] args){
   int i =2;
   do {
```

```
System.out.println(i);
       i=i+2
     }
     while(i<=50);
  }
}
Output:
  6
  10
  12
  14
  16
  18
  20
  22
  24
  26
  28
  30
  32
  34
  36
  38
  40
  42
  44
  46
  48
  50
  BUILD SUCCESSFUL (total time: 0 seconds)
```

9. Write a Java Programme to find sum (1-10)

```
Code Blame 6 lines (5 loc) · 117 Bytes  Code 55% faster with GitHub Copilot

1  // find sum of 1-10 using for loop
2  v public class Assignment10 {
3  public static void main(String[] args) {
4
5  }
6  }
```

Input: package practisejava;

```
public class Assignment10 {
public static void main(String [] args){
    int i,sum=0;
    for(i=1;i<=10;i++)
      sum+=i;
    System.out.println(sum);
  }
}
}
Output:
 run:
 55
 BUILD SUCCESSFUL (total time: 0 seconds)
10. Write a Java Programme to check break statement.
Input:
package begginnerjava;
public class BreakStatement {
  public static void main(String [] args){
    for( int i=1;i<=100;i++){
```

```
if(i==10){
    continue;
}

System.out.println(i);
}
```

```
run:
2
3
4
5
6
7
8
9
11
12
13
14
15
16
17
18
19
20
21
```

10. Write a Java To find n factorial Number.

Input: package practisejava;

```
import java.util.Scanner;
public class Assignment11 {
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter number: ");
    int n = sc.nextInt();
    double fact=1;
    for(int i=1;i<=n;i++)
    {
      fact*=i;
    System.out.println("Factorial of n: "+fact);
}
}
Output:
 Enter number: 4
 Factorial of n: 24.0
 BUILD SUCCESSFUL (total time: 4 seconds)
```

11. Write a java programme to find odd numbers m to n.

```
6 lines (5 sloc) | 119 Bytes

1    // print sum of odd numbers from m-n
2  public class Assignment12 {
3    public static void main(String[] args) {
4
5    }
6 }
```

```
Input:
package practisejava;
import java.util.Scanner;
public class Assignment12 {
  public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    System.out.print("Enter starting number: ");
    int m = sc.nextInt();
    System.out.print("Enter ending number: ");
    int n = sc.nextInt();
    int sum = 0;
    for(int i=m;i<=n;i++)</pre>
      if(i%2!=0)
      {
         sum+=i;
      }
    System.out.println("Sum of odd numbers from "+m+" to "+n+":
"+sum);
  }
}
}
```

```
run:
Enter starting number: 12
Enter ending number: 14
Sum of odd numbers from 12 to 14: 13
BUILD SUCCESSFUL (total time: 7 seconds)
```

12. Write a java programme to find even numbers m to n.
Input:
package begginnerjava;

public class forloop1 {
 public static void main(String [] args){
 int sum=0;
 for(int i=1;i<=10; i++){
 sum = sum + i;
 }

 System.out.println(" the sum is : "+sum);
}</pre>

Output:

```
run:
the sum is : 55
BUILD SUCCESSFUL (total time: 0 seconds)
```

```
Write a java programme to find sum numbers m to n.
13.
1+2+3+.....+n
Input:
package begginnerjava;
import java.util.Scanner;
public class Series1 {
  public static void main(String[] args){
    Scanner input = new Scanner(System.in);
    int n,sum=0;
    System.out.print("Enter the last number : ");
    n = input.nextInt();
    for (int i=1; i <= n; i=i+1){
      System.out.print(i+"");
      sum = sum + i;
    }
    System.out.println();
    System.out.println("sum");
```

}

```
beginnerjava.Series1 >  main >

Output - BeginnerJava (run) ×

run:
Enter the last number = 10
1 2 3 4 5 6 7 8 9 10

SS

BUILD SUCCESSFUL (total time: 2 seconds)
```

```
Series

1. 1 + 2 + 3 + ...... +n
2. 1 + 3 + 5 + ..... +n
3. 2 + 4 + 6 +... +n
4. 1.5 + 2.5 + 3.5 + .... +n
5. 1^2 + 2^2 + 3^2 + 4^2 + .... +n^2
```

```
14. Write a Java Programme to Find the Series .
1.5+2.5+3.5+.....+n
Input:

package begginnerjava;

import java.util.Scanner;
public class Series1 {
    public static void main(String[] args){
        Scanner input = new Scanner(System.in);

        double n ,sum=0;
        System.out.print("Enter the last number = ");
```

```
n = input.nextDouble();
    for (double i = 1.5; i <= n; i = i+1){
      System.out.print(i+" ");
      sum = sum + i;
    }
    System.out.println();
    System.out.println(sum);
  }
}
Output:
Enter the last number = 10
1.5 2.5 3.5 4.5 5.5 6.5 7.5 8.5 9.5
49.5
BUILD SUCCESSFUL (total time: 2 seconds)
      Write a Java Programme to Find the Series .
15.
1^2+2^2+3^2+.....n
Input:
package begginnerjava;
import java.util.Scanner;
public class Series1 {
  public static void main(String[] args){
    Scanner input = new Scanner(System.in);
```

```
System.out.print("Enter the last number = ");
    n = input.nextInt();
    for (int i = 1; i <= n; i = i+1){
      System.out.print(i+"X"+i);
      sum = sum + i*i;
    }
    System.out.println();
    System.out.println(sum);
  }
}
Output:
 run:
 Enter the last number = 5
 1X12X23X34X45X5
 55
 BUILD SUCCESSFUL (total time: 7 seconds)
      Write a Java Programme to Find the Series.
1 X 2 X 3 X ......N
Input:
package begginnerjava;
import java.util.Scanner;
public class Series02 {
  public static void main(String [] args){
  Scanner input = new Scanner(System.in);
    int n,result=1;
  System.out.print("Enter the last number = ");
```

int n ,sum=0;

```
n = input.nextInt();
  for (int i=1 i <=n; i=i+2){
    System.out.print(i+" ");
    result = result * i;
  }
  System.out.println();
  System.out.println(result);
}
Output:
Enter the last number = 5
 1 3 5
 15
 BUILD SUCCESSFUL (total time: 8 seconds)
      Write a Java Programme to Find Multipication Table.
17.
Input:
package begginnerjava;
import java.util.Scanner;
public class MultipicationTable {
 public static void main(String[] args){
   Scanner input = new Scanner(System.in);
   int num;
   System.out.print("Enter any muber = ");
```

```
num = input.nextInt();
   for (int i =1; i <= 10; i++){
     System.out.println(num+ "X"+i + " = "+num*i);
   }
 }
}
Output:
Enter any muber = 5
5x1 = 5
5x2 = 10
5x3 = 15
 5x4 = 20
 5x5 = 25
5x6 = 30
 5x7 = 35
 5x8 = 40
5x9 = 45
5x10 = 50
BUILD SUCCESSFUL (total time: 5 seconds)
      Write a Java Programme to Find Multipication Table.
18.
Input:
package begginnerjava;
import java.util.Scanner;
```

```
public class MultipicationTable {
 public static void main(String[] args){
    Scanner input = new Scanner(System.in);
    int m,n
    System.out.print("Enter inital number = ");
    m = input.nextInt();
    System.out.print("Enter last number = ");
    n = input.nextInt();
    for (int i = m; i <= n; i++){
          for (int j = 1; j \le 10; j++){
     Syst3em.out.println(i+ " X "+j + " = "+i*j);
 }
}
Output:
```

```
run:
 Enter inital number = 3
 Enter last number = 4
  3 \times 1 = 3
  3 \times 2 = 6
  3 \times 3 = 9
  3 \times 4 = 12
  3 \times 5 = 15
  3 x 6 = 18
  3 \times 7 = 21
  3 \times 8 = 24
  3 \times 9 = 27
  3 \times 10 = 30
  4 \times 1 = 4
  4 \times 2 = 8
  4 \times 3 = 12
  4 \times 4 = 16
  4 \times 5 = 20
  4 \times 6 = 24
  4 \times 7 = 28
  4 \times 8 = 32
  4 \times 9 = 36
  4 \times 10 = 40
 BUILD SUCCESSFUL (total time: 4 seconds)
utput
19.
       Write a Java Programme to check prime number or not.
Input:
package begginnerjava;
import java.util.Scanner;
public class primenumber {
  public static void main(String [] args){
```

Scanner input = new Scanner (System.in);

int num = input.nextInt();

for (int i = 2; i < num; i++){

int count = 0;

System.out.print("Enter any Positive integer : ");

```
if(num%i==0){
        count++;
        break;
      }
      }
     if (count==0){
       System.out.println("Prime Number");
     }
     else {
       System.out.println("Not Prime");
     }
    }
  }
}
Output:
```

```
run:
Enter any Positive integer: 12
Not Prime
BUILD SUCCESSFUL (total time: 3 seconds)
20.
      Write a Java Programme to check prime number m to n.
Input:
package begginnerjava;
import java.util.Scanner;
public class primetest {
  public static void main(String [] args){
   int m,n,count=0,total Prime=0;
   Scanner input = new Scanner(System.in);
   System.out.print("Enter Initial Number : ");
   m = input.nextInt();
   System.out.print("Enter last Number : ");
   n = input.nextInt();
   for(int i=m; i<=n; i++)
     for(int j=2; j<=i-1; j++){
      if(i\%j==0){
        count++;
       break;
}
      if(count==0){
      System.out.println(i);
      total Prime++;
  }
       count=0;
  }
```

```
System.out.println("Total Prime : "+total prime);
}
```

21. Write a Java Programme to check fibonaaci series. Input:

```
package begginnerjava;
import java.util.Scanner;
public class FibonaaciSeries {
  public static void main(String [] args){
   Scanner input = new Scanner(System.in);
  System.out.print("How many Numbers : ");
   int n = input.nextInt();
  int first = 0;
   int second = 1;
   int fibo;
  System.out.println(first+ " " +second);
    for(int i =3; i<=n; i++){
       fibo = first + second;
       System.out.println(" "+fibo);
       first = second;
       second=fibo;
```

```
}
}
Output:
```

```
run:
How many Numbers: 7
0 1
1
2
3
5
8
BUILD SUCCESSFUL (total time: 33 seconds)
```

22. Write a Java Programme to check fibonaaci series.

Input:

package practisejava;

```
import java.util.Scanner;
public class Assignment13 {
  public static void main(String [] args){
 Scanner x = new Scanner (System.in);
    System.out.print("Which fibonacci number you want to see: ");
    int n =x.nextInt();
    int first=0;
    int second=1;
    int fibo=0;
    if(n==1)
      System.out.println("Your "+n+"th fibonacci number is : "+first);
    else if(n==2){
      System.out.println("Your "+n+"th fibonacci number is: "+second);
    }
    else{
      for(int i=3; i<=n; i=i+1){
        fibo=first+second;
        first=second;
        second=fibo;
      }
      System.out.println("Your "+n+"th fibonacci number is: "+fibo);
    }
 }
egginnerjava (run) A Fracusciava (run) A
 run:
Which fibonacci number you want to see : 5
 Your 5th fibonacci number is: 3
 BUILD SUCCESSFUL (total time: 4 seconds)
```

```
23. Write a Java Programme to check sum of digits.
Input:
package begginnerjava;
import java.util.Scanner;
public class Sumofdigits {
  public static void main(String [] args){
    Scanner input = new Scanner (System.in);
    int sum = 0 , r,temp,num;
    System.out.print("Enter any Number : ");
    num = input.nextInt();
    temp = num;
     while (temp != 0)
      r = temp \% 10;
      sum = sum + r;
      temp = temp / 10;
     }
     System.out.println("sum of digits:"+sum);
 }
}
Output:
run:
Enter any Number: 456
sum of digits :15
BUILD SUCCESSFUL (total time: 15 seconds)
```

```
24. Write a Java Programme to check Reverse sum of digits
Input:
package begginnerjava;
import java.util.Scanner;
public class ReverseNumber {
  public static void main(String [] args){
    Scanner input = new Scanner(System.in);
    int num,sum=0,temp,r;
    System.out.print("Enter any number : ");
    num = input.nextInt();
    temp = num;
    while (temp!=0){
      r = temp \% 10;
      sum = sum *10 + r;
      temp = temp / 10;
    }
    System.out.println("Reverse : "+sum);
  }
}
Output:
run:
Enter any number: 456
Reverse: 654
BUILD SUCCESSFUL (total time: 4 seconds)
```

Write a Java Programme to check Palindrome number. Input: package begginnerjava; import java.util.Scanner; public class Palindromenumber { public static void main(String [] args){ Scanner input = new Scanner(System.in); int num,sum=0,temp,r; System.out.print("Enter any number : "); num = input.nextInt(); temp = num; while(temp!=0){ r = temp % 10;sum = sum *10 + r; temp = temp / 10; } if (num==sum){ System.out.println("Palindrome Number"); } else {

System.out.println(" Not a Palindrome Number");

}

```
Output:
run:
Enter any number: 456
Not a Palindrome Number
BUILD SUCCESSFUL (total time: 4 seconds)
```

26. Write a Java Programme to check Palindrome number m to n

```
// 1. generate and print palindrome numbers from m-n
// 2. count and print number of palindrome numbers
import java.util.Scanner;

// public class Assignment14 {

public static void main(String[] args) {

try (Scanner input = new Scanner(System.in)) {

System.out.print("start number: ");

int m = input.nextInt();

System.out.print("end number: ");

int n = input.nextInt();

int totalPalindromeNumber=0;

System.out.println("Total Palindrome numbers : "+totalPalindromeNumber);

System.out.println("Total Palindrome numbers : "+totalPalindromeNumber);

System.out.println("Total Palindrome numbers : "+totalPalindromeNumber);

}
```

```
package practisejava;
```

Input:

```
import java.util.Scanner;
public class Assignment14 {
   public static void main(String[] args) {
        Scanner input=new Scanner(System.in);
        int n1, n2, t, sum=0, count=0, r, i;
        System.out.print("Enter initial number:");
```

```
n1=input.nextInt();
    System.out.print("Enter final number:");
    n2=input.nextInt();
    System.out.print("Pallindrome numbers from "+n1+" to "+n2+"
are:");
    for(i=n1; i<=n2; i++)
    {
      t=i;
      while(t!=0 && i>10)
        r=t%10;
        sum=sum*10+r;
        t=t/10;
      if(sum==i)
        System.out.print(i+" ");
        count++;
      }
      sum=0;
    System.out.println();
    System.out.println("Total Palindrome numbers from "+n1+" to
"+n2+" are:"+count);
  }
}
}
Output:
Enter initial number: 123
Enter final number: 456
Pallindrome numbers from 123 to 456 are:131 141 151 161 171 181 191
Total Palindrome numbers from 123 to 456 are:33
BUILD SUCCESSFUL (total time: 12 seconds)
```

```
27.
      Write a Java Programme to check Armstone number.
Input:
package begginnerjava;
import java.util.Scanner;
public class ArmstoneNumber {
  public static void main(String [] args){
    Scanner input = new Scanner(System.in);
    int num,sum=0,temp,r;
    System.out.print("Enter any number : ");
    num = input.nextInt();
    temp = num;
    while(temp!=0){
      r = temp \% 10;
      sum = sum *10 + r * r *r;
      temp = temp / 10;
    }
    if (num==sum){
      System.out.println("Armstrong Number ");
   }
   else {
     System.out.println(" Not a Armstrong Number");
   }
}
```

```
run:
Enter any number : 123
  Not a Armstrong Number
BUILD SUCCESSFUL (total time: 11 seconds)
```

28. Write a Java Programme to chech m to n Armstone Number.

```
// 1. generate and print armstrong numbers from m-n
// 2. count and print number of armstrong numbers
import java.util.Scanner;

// public class Assignment15 {

public static void main(String[] args) {

try (Scanner input = new Scanner(System.in)) {

System.out.print("start number: ");

int m = input.nextInt();

System.out.print("end number: ");

int n = input.nextInt();

int n = input.nextInt();

System.out.println("Total armstrong numbers : "+totalArmstrongNumber);

System.out.println("Total armstrong numbers : "+totalArmstrongNumber);

System.out.println("Total armstrong numbers : "+totalArmstrongNumber);

}

}
```

```
Input:
```

```
package practisejava;
import java.util.Scanner;
public class Assignment15 {
 public static void main(String[] args) {
    Scanner input=new Scanner(System.in);
    int n1, n2, i, temp, r, sum=0, count=0;
    System.out.print("Enter Initial Number:");
    n1=input.nextInt();
    System.out.print("Enter Final Number:");
    n2=input.nextInt();
    System.out.print("Armstrong number from "+n1+" to "+n2+" are:");
    for(i=n1; i<=n2; i++)
    {
      temp=i;
      while(temp!=0)
         r=temp%10;
        sum=sum+r*r*r;
        temp=temp/10;
      }
      if(i==sum)
      {
        System.out.print(i+" ");
        count++;
      }
      sum=0;
    }
    System.out.println();
    System.out.println("Total Armstrong number from "+n1+" to "+n2+"
are:"+count);
  }
}
}
```

```
run:
Enter Initial Number:1
Enter Final Number: 1000
Armstrong number from 1 to 1000 are:1 153 370 371 407
Total Armstrong number from 1 to 1000 are:5
BUILD SUCCESSFUL (total time: 6 seconds)
```

29. Write a Java Programme Using Loop M to N.

```
Blame 4 lines (4 loc) - 297 Bytes
Code
                                               Code 55% faster with GitHub Copilot
          // validate user based on username and password
          // input username and password until username=="anis" and password=="123456"
```

Input:

```
package practisejava;
import java.util.Scanner;
public class Assignment16 {
 public static void main(String[] args) {
    Scanner input = new Scanner( System.in);
    for (int x = 0; x <= 10; x++){
      System.out.print("Username : ");
      String username = input.next();
      System.out.print("Password : ");
      int pass = input.nextInt();
      if( pass == 123456 && username.contains("anis")){
         System.out.println("Well come to the system");
         break;
      }else{
         System.out.println("user name and password is incurrect.Please
try again.");
      }
    }
```

```
}
}
}
Output:
Username : anis
Password: 123
user name and password is incurrect. Please try again.
     Write a Java Programme Pattern Using Loop.
30.
Input:
package begginnerjava;
import java.util.Scanner;
public class pattern01 {
  public static void main(String [] args){
    Scanner input = new Scanner(System.in);
    System.out.print("Enter the line numbers : ");
    int n = input.nextInt();
    for (int row =1; row<=n; row++){
      for (int col =1; row<=n; col++){
        System.out.println(" "+col);
      }
       System.out.printrln();
    }
```

}

```
Output - java_basic (run) ×

Fun:
Please enter line numebrs:

1
1
1
2
1 2
1 2
3
1 2 3 4
BUILD SUC ESSFUL (total time: 4 seconds)
```

31. Write a Java Programme Pattern Triangle . Input:

```
package begginnerjava;
import java.util.Scanner;
public class pattern2 {
  public static void main(String [] args){
    Scanner input = new Scanner(System.in);
    System.out.print("Enter the line numbers : ");
    int n = input.nextInt();
    for (int row =n; row>=1; row--){
        for (int col =1; col<=row; col++){
            System.out.print(" "+col);
        }
            System.out.printrln();
```

```
}
```

```
}
```

}

Output:

```
Please enter line numebrs :
4
1 2 3 4
1 2 3
1 2
1
BUILD SUCCESSFUL (total time
```

32. Write a Java Programme Pattern related .

```
Input:
package practisejava;
import java.util.Scanner;
public class Assignment17 {
  public static void main(String [] args){
   Scanner in= new Scanner(System.in);
    int n, row, col;
    System.out.print("How many lines: ");
    n = in.nextInt();
    in.close();
    for(row=1; row<=n; row++){</pre>
      for(col=1; col<=row; col++){</pre>
        System.out.print(" "+col%2);
      System.out.println(" ");
    }
 }
}
Output:
 How many lines: 4
   1
   1 0
   1 0 1
   1 0 1 0
 BUILD SUCCESSFUL (total time: 3 seconds)
```