JAVA JOURNAL-1

1. Write a program to take command line input and check number is odd or even.

```
  import java.util.Scanner;  class
prog_1{
public static void main(String [] args){         int no;
        Scanner sc = new Scanner(System.in);
System.out.print("Enter any No. : ");          no
= sc.nextInt();          if(no%2==0)
            System.out.println("The value "+no+" is even.");         else
System.out.println("The value "+no+" is odd.");      }
}
```

Output

```
C:\Piyush\21BCA158 journal-1>java prog_1
Enter any No. : 5

The value 5 is odd.
```

2. Write a program to take command line input and sum of 2 number.

```
import java.util.Scanner;  class prog_2 {      public
static void main(String args[]) {         int a, b,
sum;
        Scanner sc = new Scanner(System.in);
System.out.print("Enter the first No. : ");          a =
sc.nextInt();
        System.out.print("Enter the second No. : ");          b
= sc.nextInt();          sum = sum(a, b);
        System.out.println("The sum of two numbers "+a+" and "+b+" is: " +
sum);     }
public static int sum(int a, int b) {
int sum = a + b;      return sum;
}   }
```

Output

```
C:\Piyush\21BCA158 journal-1>java prog_2

Enter the first No. : 10

Enter the second No. : 5
```

The sum of two numbers 10 and 5 is: 15

3. Write a program to take command line input and calculate a Simple Interest.

```
import java.util.Scanner; class prog_3 {      public
static void main (String args[]) {          float
p, r, n, si;
        Scanner s=new Scanner(System.in);
        System.out.print("Enter Value For Princip Amount :");
p=s.nextFloat();
        System.out.print("Enter Value For Number Of Month :");
n=s.nextFloat();
        System.out.print("Enter Value For Rate :");          r=s.nextFloat();
si = (p*r*n)/100;
        System.out.println("Simple Interest is : " +si);
    }
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_3

Enter Value For Princip Amount :10000

Enter Value For Number Of Month :3

Enter Value For Rate :2

Simple Interest is : 600.0

4. Write a Program to take command line input and Check Number is Positive or Negative.

```
import java.util.Scanner;  class
prog_4 {
    public static void main(String [] a) {

       int b;
        Scanner sc = new Scanner(System.in);
System.out.print("Enter any No. : ");
b = sc.nextInt();          if(b>0) {
            System.out.println(b+" is Positive.");
        }         else
```

```
{
            System.out.println(b+" is Nagetive.");
        }
    }
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_4

Enter any No. : 10

10 is Positive.

5. Write a Program to take command line input and Check Year is Leap Year or Not.

```
import java.util.Scanner; class prog_5 {
public static void main(String[] args) {
int year;
        boolean leap = false;
        Scanner s=new Scanner(System.in);
System.out.print("Enter any year : ");
year=s.nextInt();          if (year % 4 == 0) {              if
(year % 100 == 0) {                    if (year
% 400 == 0)                       leap = true;
else
                     leap = false;
}             else
leap = true;
}         else {
leap = false;              if
(leap)
                System.out.println(year + " is a leap year.");  else
                System.out.println(year + " is not a leap year.");
        }
    }
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_5

Enter any year : 2002

2002 is not a leap year.

6. Write a program to take command line input and find the Character Is Vowel or Not.

```
import java.util.Scanner; class prog_6 {
public static void main(String [] args) {
char a;
        Scanner sc=new Scanner(System.in);         System.out.print("Enter
any Character :");         a = sc.next().charAt(0);         if(a == 'a' || a
== 'e' || a == 'i' || a == 'o' || a == 'u' || a ==
'A' || a == 'E' || a == 'I' || a == 'O' || a == 'U' )
System.out.println(a +" is vowel");         else
            System.out.println(a+ " is consonant");
}
}
```

Output

C:\Ashish\21BCA103 journal-1>java prog_6

Enter any Character :A

A is vowel

7. Write a program to reverse a given number using while loop.

```
import java.util.Scanner;       class prog_7 {     public static void
main(String[] args) {         int n , r = 0;
        System.out.print("Enter any No. to reverse : ");
Scanner sc = new Scanner(System.in);         n =
sc.nextInt();         while(n != 0) {              int re
= n % 10;              r = r * 10 + re;              n =
n/10;          }
        System.out.println("The reverse of the given number is : " + r);
}
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_7

Enter any No. to reverse : 4321

The reverse of the given number is : 1234

8. Write a program to reverse a given number using for loop.

```
import java.util.Scanner; class prog_8 {
public static void main(String[] args) {
int n,i,r = 0;
        System.out.print("Enter any No. to reverse : ");
Scanner sc = new Scanner(System.in);          n =
sc.nextInt();          for(i=1;n!=0;i++) {              int
re = n % 10;               r = r * 10 + re;               n =
n/10;
        }
        System.out.println("The reverse of the given number is : " + r);
    }
}
```

Output

C:\Piyush\21BCA158journal-1>java prog_8

Enter any No. to reverse : 1234

The reverse of the given number is : 4321

9. Write a program to check number is Armstrong or Not

```
import java.util.Scanner; class prog_9 {
public static void main(String[] args) {
int n, no, r, rem = 0;
        Scanner sc = new Scanner(System.in);
System.out.print("Enter the No. : ");
n = sc.nextInt();          no = n;
while (no != 0) {              r = no % 10;
rem += Math.pow(r, 3);              no /= 10;
        }         if(rem
== n)
            System.out.println(n + " is an Armstrong number.");          else
            System.out.println(n + " is not an Armstrong number.");
}
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_9

Enter the No. : 69

69 is not an Armstrong number.

10. Write a to check number is Prime number or not.

```
import java.util.Scanner; public class prog_10
{     public static void main(String args[])
{          int i,n,m=0,flag=0;
        Scanner sc = new Scanner(System.in);
System.out.print("Enter any No. : ");
n = sc.nextInt();          m=n/2;
if(n==0||n==1) {
            System.out.println(n+" is not prime number");
        }         else {
for(i=2;i<=m;i
++) {                  if(n%i==0)
{
                    System.out.println(n+" is not prime number");
flag=1;                       break;
                }
}               if(flag==0)
{
                System.out.println(n+" is prime number");

           }
        }
    }
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_10

Enter any No. : 123

123 is not prime number

11. Write a program to check given string is Palindrome or not.

```
import java.util.Scanner; class
prog_11 {
    public static void main(String[] args) {
Scanner sc=new Scanner(System.in);          String
str, reverseStr = "";
        System.out.print("Enter any string :");         str =
sc.nextLine();         int strLength = str.length();         for (int
```

```
i = (strLength - 1); i >=0; --i) {              reverseStr =
reverseStr + str.charAt(i);          }          if
(str.toLowerCase().equals(reverseStr.toLowerCase())) {
System.out.println(str + " is a Palindrome String.");
        }         else
{
            System.out.println(str + " is not a Palindrome String.");
        }
    }
}
```

Output

C:\Piyush\21BCA158 journal-1>java prog_11

Enter any string :Piyush

Piyush is not a Palindrome String.

12. Write a program in java to display the pattern like right angle triangle using an asterisk.

```
*

* *

* * *

* * * *

* * * * *
```

```
import java.util.Scanner; class prog_12 {
public static void main(String [] args) {
int i,a,b=0;
        Scanner sc=new Scanner(System.in);
System.out.print("Enter any No. : ");
a = sc.nextInt();          for(b=1;b<=a;b++) {
for(i=1;i<=b;i++) {
                System.out.print(" * ");
            }
            System.out.println("\n");
        }
    }
}
```

Output

```
C:\Piyush\21BCA158 journal-1>java prog_12

Enter any No. : 5

 *

* *

* * *

* * * *

* * * * *
```

13. Write a program in java to make such a pattern like a pyramid with numbers increased by 1.

```
    1
  2  3
 4 5 6
7  8  9 10
```

```
import java.util.Scanner; class prog_13 {
public static void main(String [] args) {
int i,a,b,n=1;
        Scanner sc=new Scanner(System.in);
System.out.print("Enter any No. : ");
a = sc.nextInt();          for(b=1;b<=a;b++) {
for(i=1;i<=a;i++) {
if((b+i)<=a) {
                    System.out.print(" ");
}                 else {
                    System.out.print(n+" ");
n++;
                }
            }
            System.out.println("\n");
        }
    }
}
```

Output

```
C:\Piyush\21BCA158 journal-1>java prog_13

Enter any No. : 5

  1

 2 3

 4 5 6

 7 8 9 10

11 12 13 14 15
```

14. Write a C Program to display the pattern using the alphabet.

A B C D E

A B C D

A B C

A B A

```
import java.util.Scanner; class prog_14 {
public static void main(String [] args) {
int i,a,b=0;          char c;
        Scanner sc=new Scanner(System.in);
System.out.print("Enter any No. : ");
a = sc.nextInt();          for(b=a;b>=1;b--) {
c='A';
            for(i=1;i<=b;i++) {
System.out.print(c+" ");                  c++;
            }
            System.out.println("\n");
        }
    }
}
```

Output

```
C:\Ashish\21BCA103 journal-1>java prog_14

Enter any No. : 5

A B C D E

A B C D

A B C
```

A B

A

15. Write a program to take command line input and print factorial of given number.

```
import java.util.Scanner; class prog_15 {
public static void main(String args[]) {
int n, c, f = 1;
        System.out.print("Enter an Number to calculate its factorial 'Must
Integer': ");
        Scanner in = new Scanner(System.in);
n = in.nextInt();          for(c = 1; c <= n;
c++)             f = f*c;
            System.out.println("Factorial of "+n+" is = "+f);
}
}
```

Output

```
C:\Piyush\21BCA158 journal-1>java prog_15

Enter an Number to calculate its factorial 'Must Integer': 5

Factorial of 5 is = 120
```

16. Write a program to display Fibonacci series.

```
import java.util.Scanner; public  class
prog_16 {
    public static void main(String[] args) {
int n, a = 0, b = 0, c = 1;         Scanner s
= new Scanner(System.in);
System.out.print("Enter value: ");         n
= s.nextInt();
        System.out.print("Fibonacci Series : ");         for(int
i = 1; i <= n; i++) {             a = b;             b
= c;             c = a + b;
            System.out.print(a+",");
        }
        System.out.print("\b.");
    }
```

```
}
```

Output

```
C:\Piyush\21BCA158 journal-1>java prog_16
Enter value: 5
Fibonacci Series : 0,1,1,2,3.
```