

## DAY -1 PROGRAMMAS

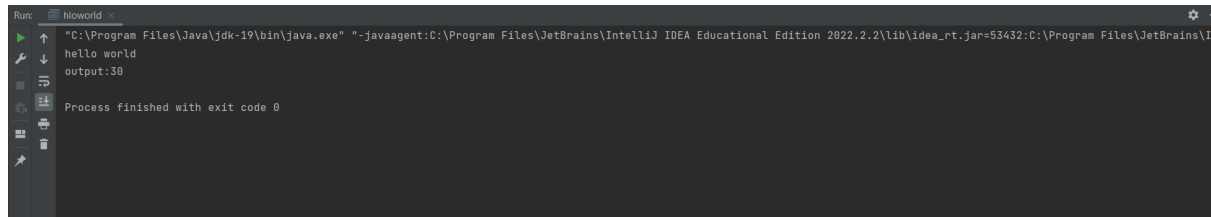
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**REG NO:192110590**

1. Write a java program to print "helloworld".

Program:-

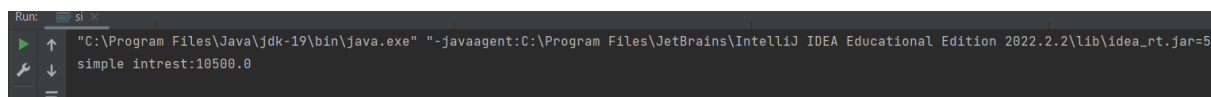
```
class helloworld
{
    public static void main(String[] args)
    {
        System.out.println("hello world");
        int a=10,b=20,c;
        c=a+b;
        System.out.println("output:"+c);
    }
}
```



2. Write a java program to find simple interest.

Program:-

```
class si
{
    public static void main(String[] args)
    {
        double p = 100000, t = 3, r = 3.5, si;
        si = (p * t * r) / 100;
        System.out.println("simple intrest:" + si);
    }
}
```



3. Write a java program to read input from user to perform addition of two numbers.

Program:-

```
import java.util.*;
class twad {
    public static void main(String args[])
    {
        int a, b, c;
        Scanner s = new Scanner(System.in);
        System.out.println("enter the two numbers:");
        a=s.nextInt();
        b=s.nextInt();
        c=a+b;
        System.out.println("output:"+c);
    }
}
```

```
Run: twad x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=53443:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin" -Didea.config.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\conf -Didea.copyright.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\copyright -Didea.home.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin -Didea.platform.prefix=IntelliJ -Djava.class.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin\idea_rt.jar -Djava.ext.dirs=C:\Program Files\Java\jdk-19\jre\lib\ext;C:\Program Files\Java\jdk-19\lib\ext -Didea.vendor.name=IntelliJ -Didea.version=2022.2.2 -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/
enter the two numbers:
output:8
```

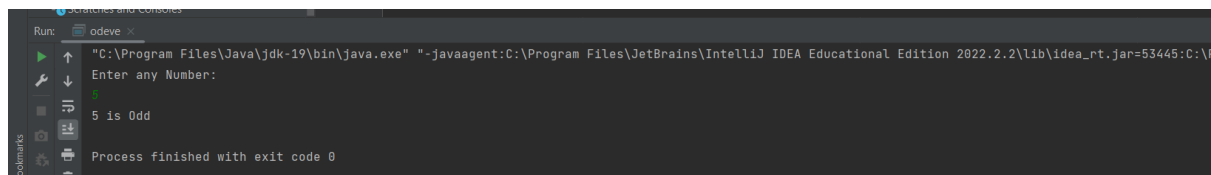
4.Implement a java program to convert celcius to Fahrenheit.

```
Program:- class temp
{
    public static void main(String args[])
    {
        float f,c;
        c=13;
        f=(c*9)/5+32;
        System.out.println("tempertaure after conerting into
fahrenheat:"+f);
    }
}
```

```
Run: temp x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=53443:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin" -Didea.config.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\conf -Didea.copyright.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\copyright -Didea.home.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin -Didea.platform.prefix=IntelliJ -Djava.class.path=C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin\idea_rt.jar -Djava.ext.dirs=C:\Program Files\Java\jdk-19\jre\lib\ext;C:\Program Files\Java\jdk-19\lib\ext -Didea.vendor.name=IntelliJ -Didea.version=2022.2.2 -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/ -Didea.welcome.url=https://www.jetbrains.com/idea/
tempertaure after conerting into fahrenheat:55.4
Process finished with exit code 0
```

5.Implement a java program to check whether a number is odd or even.

```
Program:- import java.util.*;
public class odeve
{
    public static void main(String args[])
    {
        Scanner s = new Scanner(System.in);
        int a;
        System.out.println("Enter any Number:");
        a = s.nextInt();
        if (a % 2 == 0)
        {
            System.out.println(a + " is Even");
        } else
        {
            System.out.println(a + " is Odd");
        }
    }
}
```

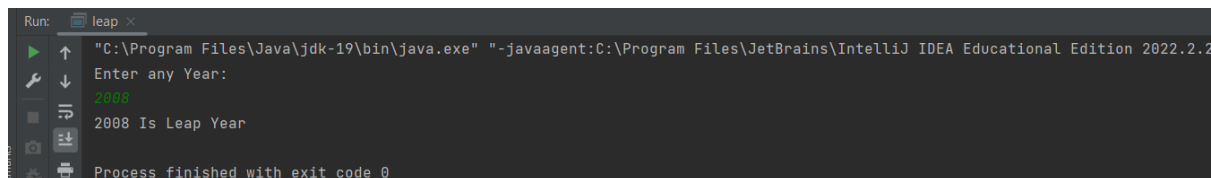


```
Run: odevs
" C:\Program Files\Java\jdk-19\bin\java.exe " -javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=53445:C:\V
Enter any Number:
5 is Odd
Process finished with exit code 0
```

6.Implement a java program to check leap year or not.

Program:-

```
import java.util.*;
class leap
{
    public static void main(String args[])
    {
        Scanner s = new Scanner(System.in);
        int y;
        System.out.println("Enter any Year:");
        y = s.nextInt();
        if (y % 4 == 0 && (y % 100 != 0 || y % 400 == 0))
        {
            System.out.println(y + " Is Leap Year");
        } else
        {
            System.out.println(y + " Is not a Leap Year");
        }
    }
}
```



```
Run: leap
" C:\Program Files\Java\jdk-19\bin\java.exe " -javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2
Enter any Year:
2008
2008 Is Leap Year
Process finished with exit code 0
```

7.Implement a java program to check eligibility of a person to vote.

Program:-

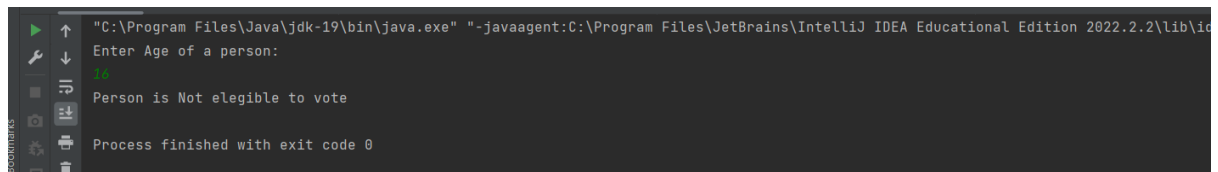
```
import java.util.*;
class vote
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        int y;
        System.out.println("Enter Age of a person:");
        y=s.nextInt();
        if(y>=18)
        {
            System.out.println("Person is Eligible to Vote");
        }
        else
        {

```

```

        System.out.println("Person is Not eligible to vote");
    }
}

```



```

"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=53592:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin" -Dfile.encoding=UTF-8
Enter Age of a person:
Person is Not eligible to vote
Process finished with exit code 0

```

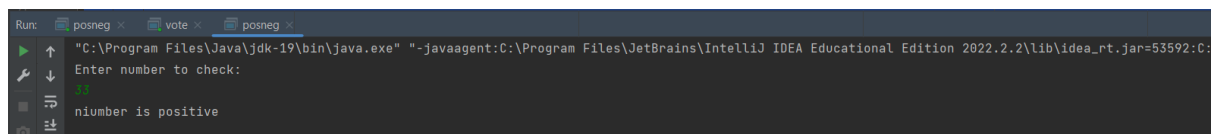
8. Write a Java program to check whether the number is positive or negative or zero.

Program:-

```

import java.util.*;
class posneg
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        int y;
        System.out.println("Enter number to check:");
        y=s.nextInt();
        if(y<0)
        {
            System.out.println("number is negative");
        }
        else if (y==0)
        {
            System.out.println("number is a zero");
        }
        else
        {
            System.out.println("number is positive");
        }
    }
}

```



```

Run: posneg x vote x posneg x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=53592:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\bin" -Dfile.encoding=UTF-8
Enter number to check:
number is positive
Process finished with exit code 0

```

9. Write a program to perform sum of 'n' numbers.

Program:-

```

import java.util.*;
class SumOfSeries
{
    public static void main(String[] args)
    {
        int n,i,sum=0;
        Scanner s=new Scanner(System.in);
        System.out.println("enter the number to print sum upto:");
        n=s.nextInt();
        for(i=0;i<=n;i++)
        {
            sum+=i;
        }
        System.out.println("Sum of series is: "+sum);
    }
}

```

```

    {
        sum=sum+i;
    }
    System.out.println("sum upto entered number is:"+sum);
}

```

```

Run: posneg x vote x SumOfSeries x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=5368:C:\Program Files\Java\jdk-19\bin"
enter the number to print sum upto:
210
sum upto entered number is:210
Process finished with exit code 0

```

10. Write a java program to find factorial of a number.

Program:-

```

import java.util.*;
class fact
{
    public static void main(String[] args)
    {
        int n,i,fact=1;
        Scanner s=new Scanner(System.in);
        System.out.println("enter the number:");
        n=s.nextInt();
        for(i=1;i<=n;i++)
        {
            fact=fact*i;
        }
        System.out.println("fact of number is:"+fact);
    }
}

```

```

Run: posneg x vote x fact x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=5368:C:\Program Files\Java\jdk-19\bin"
enter the number:
120
fact of number is:120
Process finished with exit code 0

```

11. Write a java program to print Fibonacci series.

Program:-

```

import java.util.*;
class fibonacci
{
    public static void main(String[] args)
    {
        int a=0,b=1,c,i,n;
        Scanner s=new Scanner(System.in);
        System.out.println("enter the number");
        n=s.nextInt();
        System.out.println("The fibonacci series is:");
        System.out.println(a+"\n"+b);
        for(i=2;i<=n;i++)
        {

```

```

        c=a+b;
        System.out.println(c);
        a=b;
        b=c;
    }
}

```

```

Run: posneg x vote x fibonacci x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\I
enter the number
6
The fibonacci series is:
0
1
1
2
3
5
8
Process finished with exit code 0

```

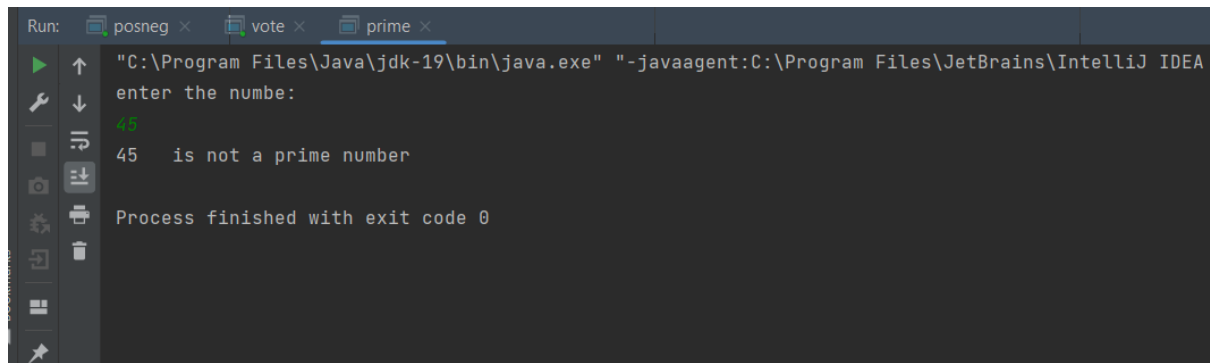
12. Write a java program to check whether a number is prime or not.

Program:-

```

import java.util.*;
class prime
{
    public static void main(String[] args)
    {
        int n,i,count=0;
        Scanner s=new Scanner(System.in);
        System.out.println("enter the numbe:");
        n=s.nextInt();
        if (n == 0 || n == 1)
            count = 1;
        for(i=2;i<n;i++)
        {
            if(n%i==0)
            {
                count++;
            }
        }
        if(count==0)
        {
            System.out.println(n+"\t is a prime number");
        }
        else {
            System.out.println(n+"\t is not a prime number");
        }
    }
}

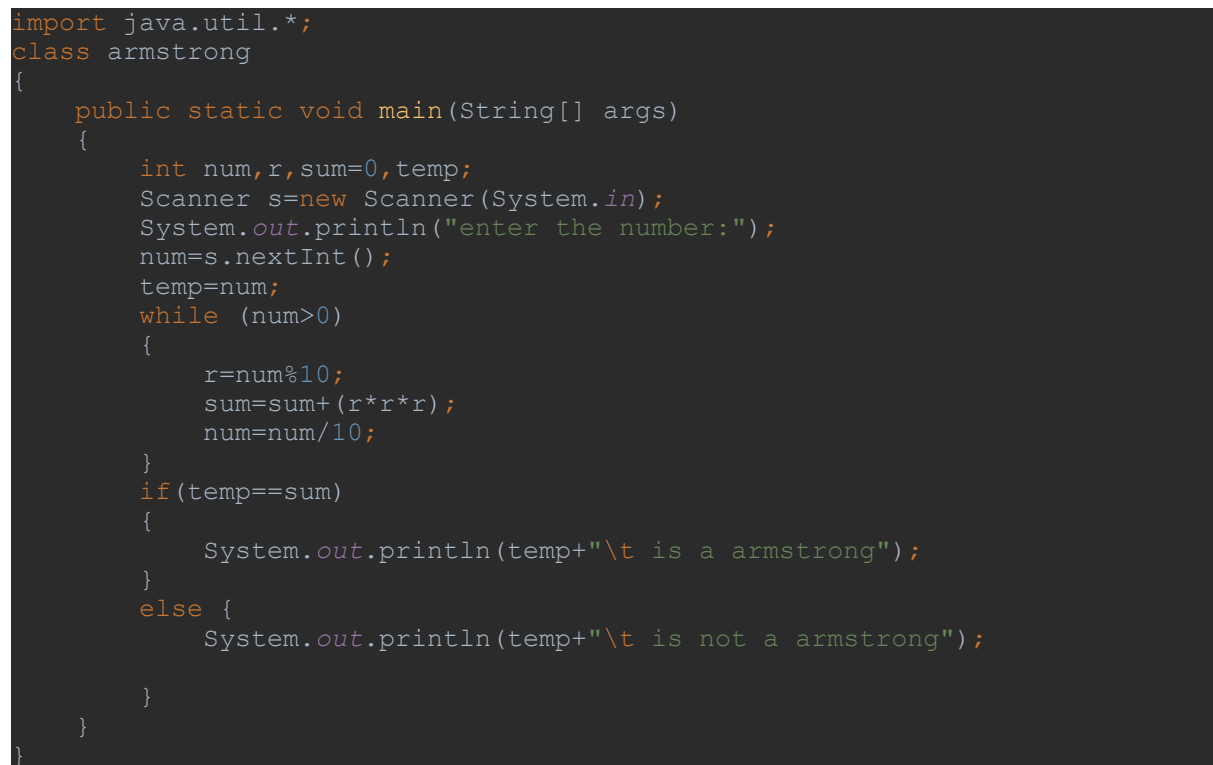
```



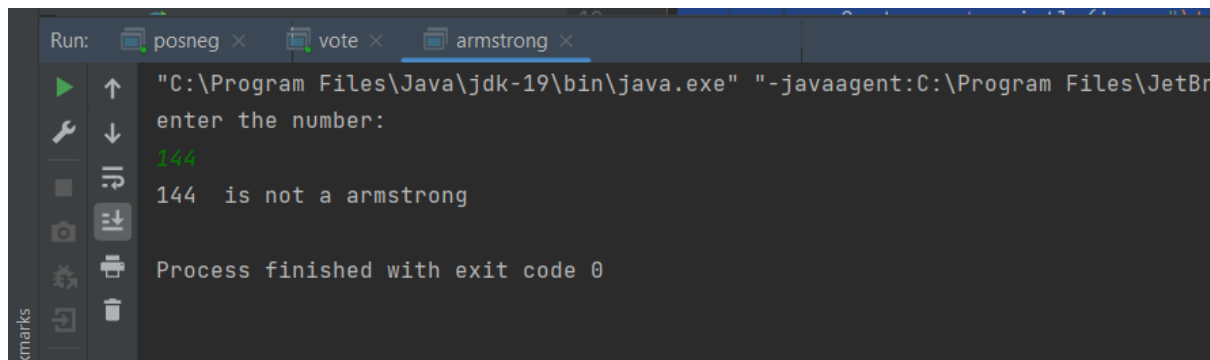
```
Run: posneg x vote x prime x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA
enter the numbe:
45
45 is not a prime number
Process finished with exit code 0
```

13. Write a Java program to check whether a number is Armstrong or not.

Program:-



```
import java.util.*;
class armstrong
{
    public static void main(String[] args)
    {
        int num, r, sum=0, temp;
        Scanner s=new Scanner(System.in);
        System.out.println("enter the number:");
        num=s.nextInt();
        temp=num;
        while (num>0)
        {
            r=num%10;
            sum=sum+(r*r*r);
            num=num/10;
        }
        if(temp==sum)
        {
            System.out.println(temp+"\t is a armstrong");
        }
        else {
            System.out.println(temp+"\t is not a armstrong");
        }
    }
}
```

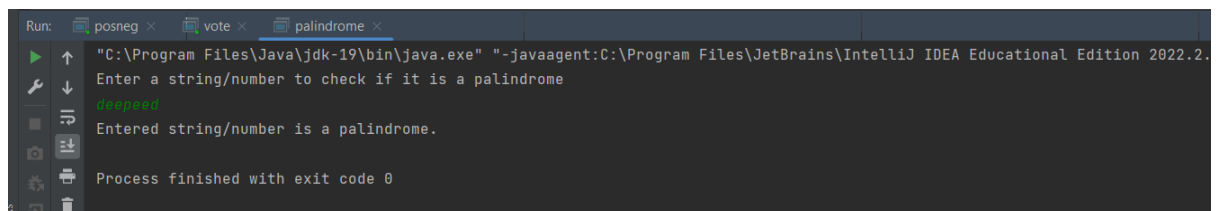


```
Run: posneg x vote x armstrong x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBr
enter the number:
144
144 is not a armstrong
Process finished with exit code 0
```

14. Write a Java program to check whether a input is palindrome or not.

Program:-

```
import java.util.*;
class palindrome
{
    public static void main(String[] args)
    {
        String original, reverse = "";
        Scanner in=new Scanner(System.in);
        System.out.println("Enter a string/number to check if it is a
palindrome");
        original=in.nextLine();
        int length=original.length();
        for( int i=length-1;i>=0;i--)
            reverse=reverse+original.charAt(i);
        if (original.equals(reverse))
            System.out.println("Entered string/number is a palindrome.");
        else
            System.out.println("Entered string/number isn't a
palindrome.");
    }
}
```



Run: posneg × vote × palindrome ×

"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2..."

Enter a string/number to check if it is a palindrome

Entered string/number is a palindrome.

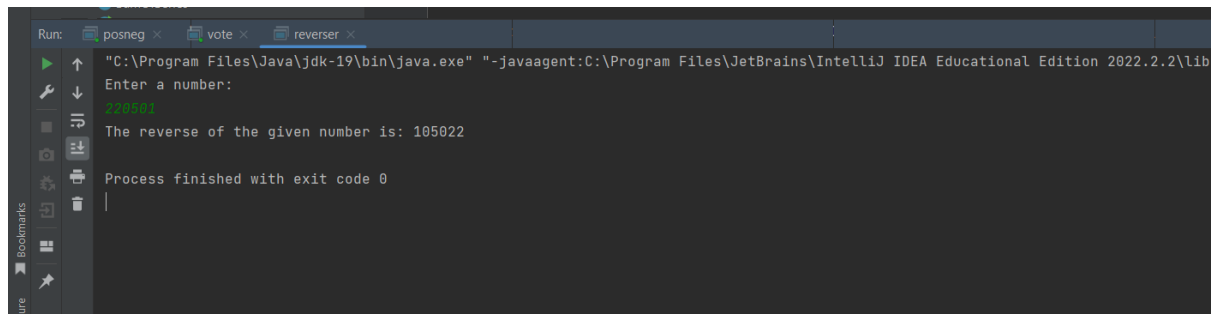
Process finished with exit code 0

15. Write a Java program to reverse a number.

Program:-

```
import java.util.*;
class reverser
{
    public static void main(String[] args)
    {
        int number, reverse = 0;
        Scanner in=new Scanner(System.in);
        System.out.println("Enter a number:");
        number=in.nextInt();
        for( ; number != 0; number=number/10)
        {
            int remainder = number % 10;
            reverse = reverse * 10 + remainder;
        }
        System.out.println("The reverse of the given number is: " + reverse);
    }
}
```





The screenshot shows the Run console in IntelliJ IDEA. The top bar indicates the current configuration is 'reverser'. The console output shows the command to run a Java program, followed by the input '2205022', the output 'The reverse of the given number is: 105022', and the message 'Process finished with exit code 0'. The left sidebar shows the 'Run' tab selected, with icons for Run, Debug, and other development tools.

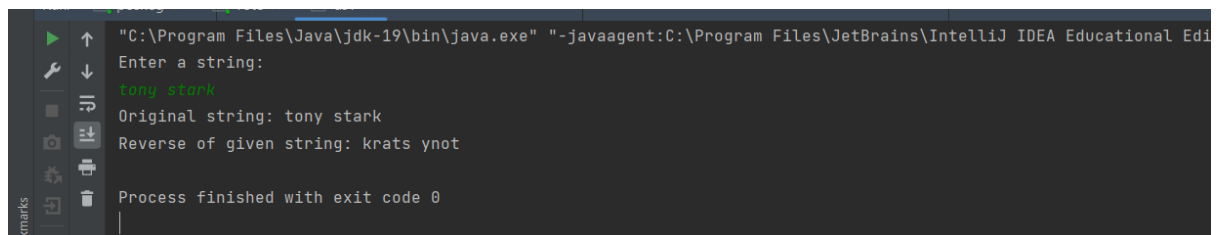
```
Run: posneg x vote x reverser x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib
Enter a number:
2205022
The reverse of the given number is: 105022
Process finished with exit code 0
```

## ASSIGNMENT -1

16. Write a program to reverse a word using loop? (Not to use inbuilt functions).

Program:-

```
import java.util.*;
class as1
{
    public static void main(String[] args)
    {
        String str, reversedStr = "";
        Scanner in = new Scanner(System.in);
        System.out.println("Enter a string:");
        str = in.nextLine();
        for(int i = str.length()-1; i >= 0; i--){
            reversedStr = reversedStr + str.charAt(i);
        }
        System.out.println("Original string: " + str);
        System.out.println("Reverse of given string: " + reversedStr);
    }
}
```



```
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edi
Enter a string:
tony stark
Original string: tony stark
Reverse of given string: krats ynot
Process finished with exit code 0
```

17. Write a program to check whether the entered user name is valid or not. Get both the inputs from the user.

Program:-

```
import java.util.*;
class as2
{
    public static void main(String[] args)
    {
        String str1, str2;
        Scanner in = new Scanner(System.in);
        System.out.println("Enter user name:");
        str1 = in.nextLine();
```

```

        System.out.println("renter user name:");
        str2=in.nextLine();
        if (str1.equals(str2))
            System.out.println("user name is valid");
        else
            System.out.println("invalid user name");
    }
}

```

```

Run: posneg x vote x as2 x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educati
Enter user name:
192111118.sse@saveetha.i
renter user name:
192111118.2222.sse@1
invalid user name

Process finished with exit code 0

```

```

Run: posneg x vote x as2 x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\
Enter user name:
saveetha.123.com
renter user name:
saveetha.123.com
user name is valid

Process finished with exit code 0

```

18. Write a program to find whether the person is eligible for vote or not. And if that particular person is not eligible, then print how many years are left to be eligible.

Program:-

```

import java.util.*;
class as3vot
{
    public static void main(String[] args)
    {
        Scanner s=new Scanner(System.in);
        int ag;
        System.out.println(" enter the age of a person:");
        ag=s.nextInt();
        if(ag<=0)
        {
            System.out.println("invalid input");
        }
        else if(ag<18)
        {
            System.out.println(" person is not eligible to vote");
            System.out.println(" person is eligible to vote after\t" +(18-ag)
            +"\t years");
        }
        else
    }
}

```

```

    {
        System.out.println(" person is eligible to vote");
    }
}

```

```

Run: posneg x vote x as3vot x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Education
enter the age of a person:
12
person is not eligible to vote
person is eligible to vote after 6 years
Process finished with exit code 0

```

19. Write a program using the function to calculate the simple interest. Suppose the customer is a senior citizen. He is being offered a 12 percent rate of interest; for all other customers, the ROI is 10 percent.

Sample Input:

Enter the principal amount: 200000

Enter the no of years: 3

Is customer senior citizen (y/n): n

Sample Output:

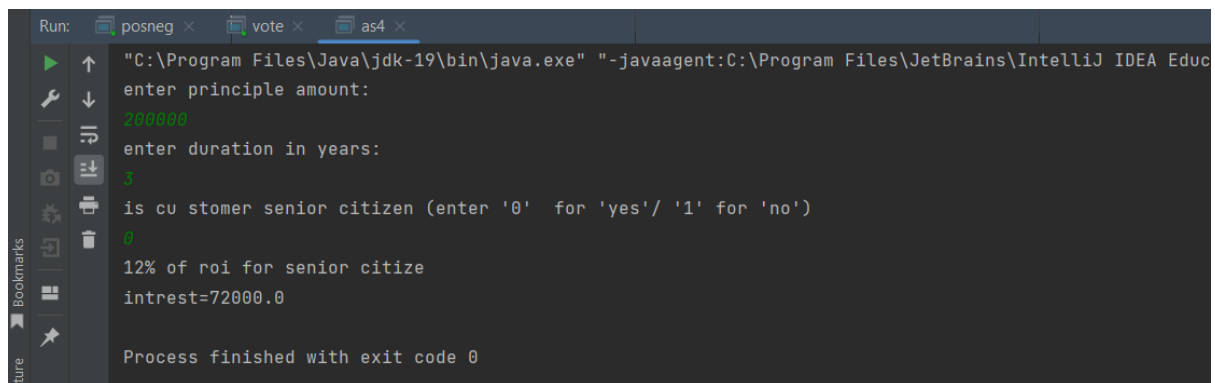
Interest: 60000

Program:-

```

import java.util.*;
class as4
{
    public static void main(String[] args)
    {
        float p,t,si,n;
        Scanner s=new Scanner(System.in);
        System.out.println("enter principle amount:");
        p=s.nextFloat();
        System.out.println("enter duration in years:");
        t=s.nextFloat();
        System.out.println("is customer senior citizen (enter '0' for
'yes'/'1' for 'no')");
        n=s.nextInt();
        if(n==0)
        {
            System.out.println("12% of roi for senior citize");
            si=(p*t*12)/100;
        }
        else
        {
            si=(p*t*10)/100;
        }
        System.out.println("intrest="+si);
    }
}

```



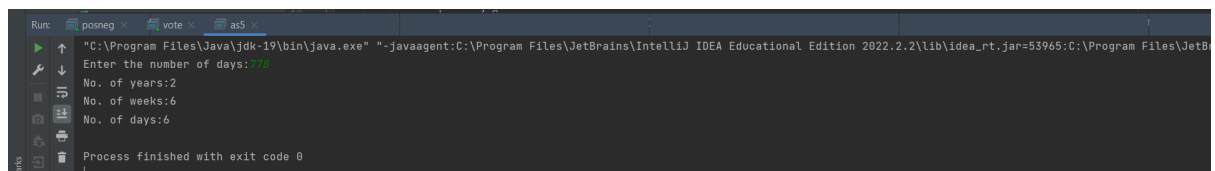
```
Run: posneg x vote x as4 x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Edu
enter principle amount:
200000
enter duration in years:
3
is customer senior citizen (enter '0' for 'yes'/'1' for 'no')
0
12% of roi for senior citize
intrest=72000.0

Process finished with exit code 0
```

20. Write a Java Program to Convert a Given Number of Days in Terms of Years, Weeks, and Days.

Program:-

```
import java.util.*;
class as5
{
    public static void main(String args[])
    {
        int m, year, week, day;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter the number of days:");
        m = s.nextInt();
        if (m <= 0)
        {
            System.out.println("invalid input");
        }
        else
        {
            year = m / 365;
            m = m % 365;
            System.out.println("No. of years:" + year);
            week = m / 7;
            m = m % 7;
            System.out.println("No. of weeks:" + week);
            day = m;
            System.out.println("No. of days:" + day);
        }
    }
}
```



```
Run: posneg x vote x as5 x
"C:\Program Files\Java\jdk-19\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Educational Edition 2022.2.2\lib\idea_rt.jar=53965:C:\Program Files\Jet8
Enter the number of days: 6
No. of years:2
No. of weeks:6
No. of days:6

Process finished with exit code 0
```