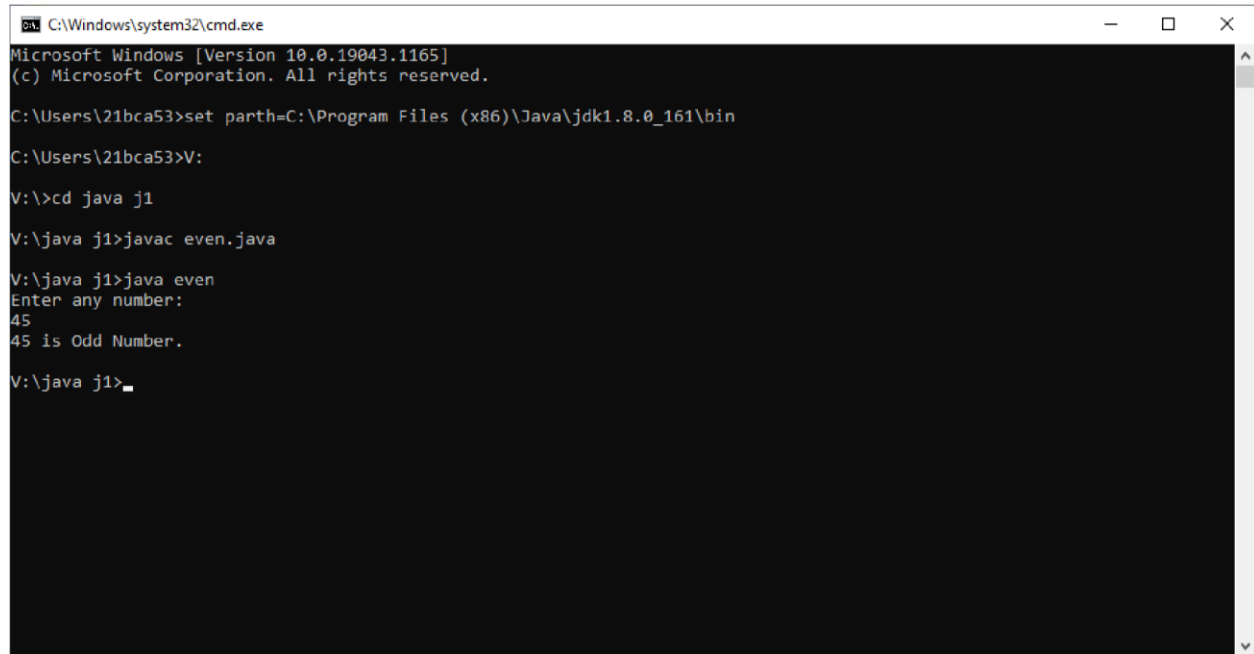# 1)Write a program to take command line input and check number is odd or even.

```java
import  java.util.Scanner;
class even {
      public static void main(String args[])
      {
            int a;
            Scanner s=new Scanner(System.in);
System.out.println("Enter any number:");            a=s.nextInt();
            if(a%2==0)
                  System.out.println(a+" is Even Number.");
            else
                  System.out.println(a+" is Odd Number.");
      }
}
```
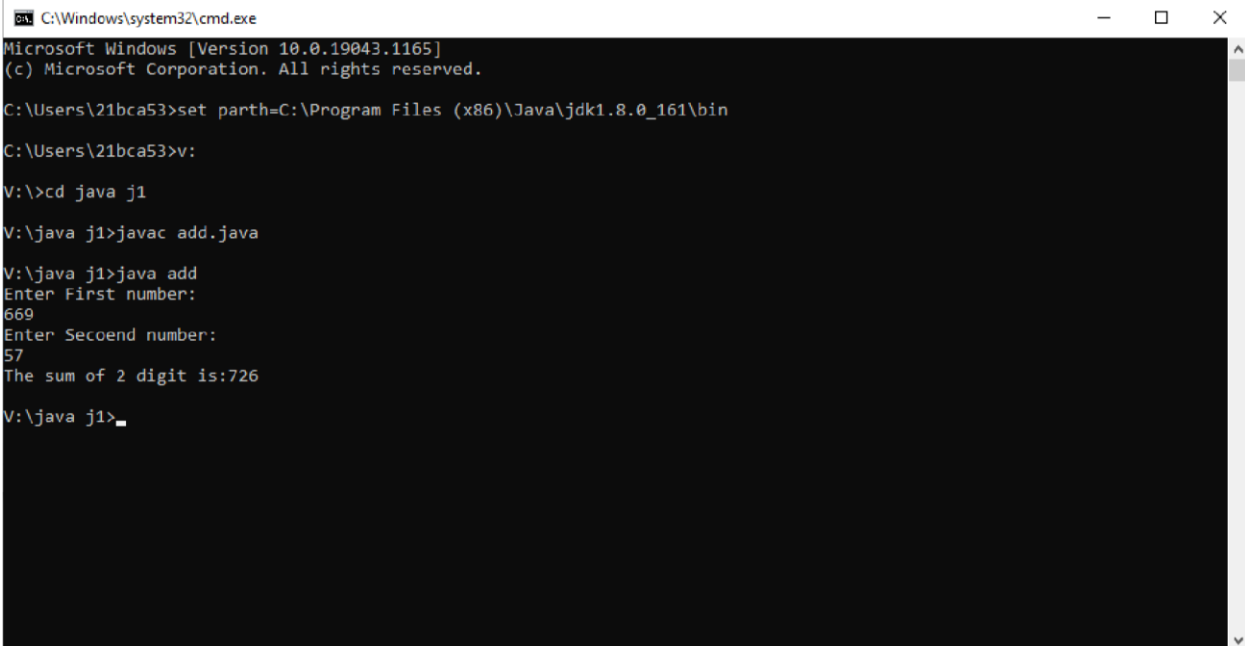
```
C:\Windows\system32\cmd.exe                                    —    □    ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>V:

V:\>cd java j1

V:\java j1>javac even.java

V:\java j1>java even
Enter any number:
45
45 is Odd Number.

V:\java j1>_
```

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

```java
import  java.util.Scanner;
class add {
      public static void main(String args[])
      {
            int a,b,c;
            Scanner s=new Scanner(System.in);
System.out.println("Enter First number:");
            a=s.nextInt();
            System.out.println("Enter Secoend number:");
            b=s.nextInt();
            c=a+b;
            System.out.println("The sum of 2 digit is:"+c);
      }
}
```
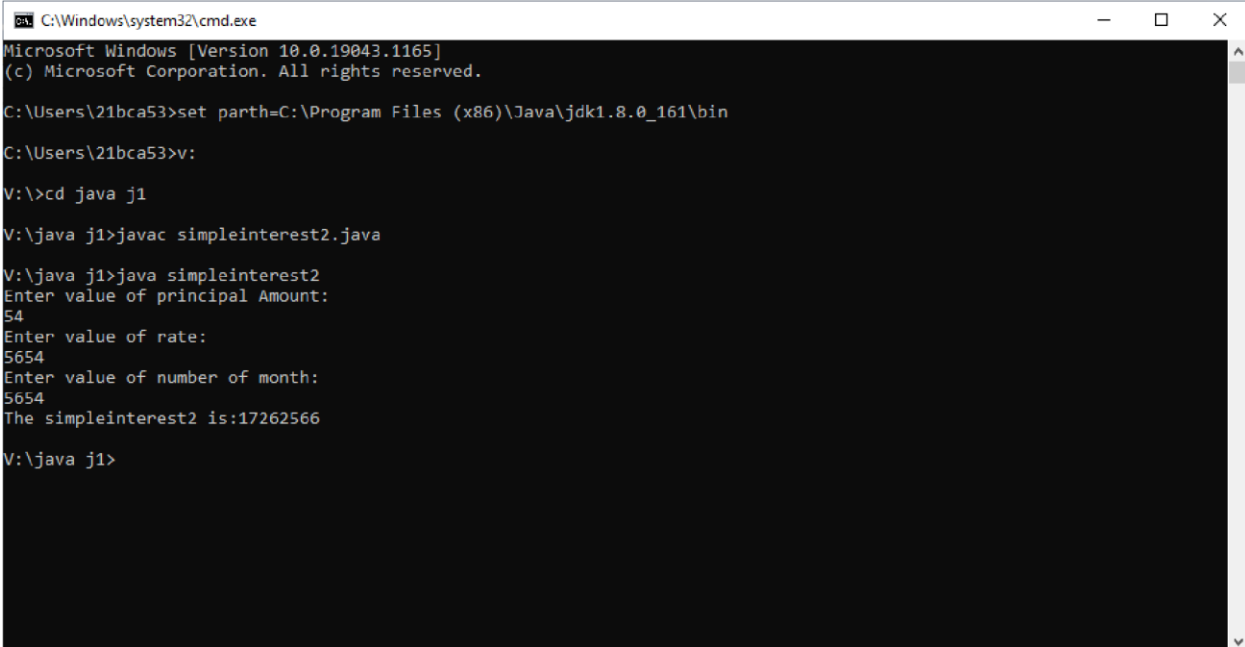
```
C:\Windows\system32\cmd.exe                                    —   □   ×
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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac add.java

V:\java j1>java add
Enter First number:
669
Enter Secoend number:
57
The sum of 2 digit is:726

V:\java j1>_
```

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

```java
import java.util.Scanner; class
simpleinterest2
{
      public static void main(String args[])
      {
            int p,r,n,a;
            Scanner s=new Scanner(System.in);
            System.out.println("Enter value of principal Amount:");
            p=s.nextInt();
            System.out.println("Enter value of rate:");
            r=s.nextInt();
            System.out.println("Enter value of number of month:");
            n=s.nextInt();
a=(p*r*n)/100;
            System.out.println("The simpleinterest2 is:"+a);
      }
}
```
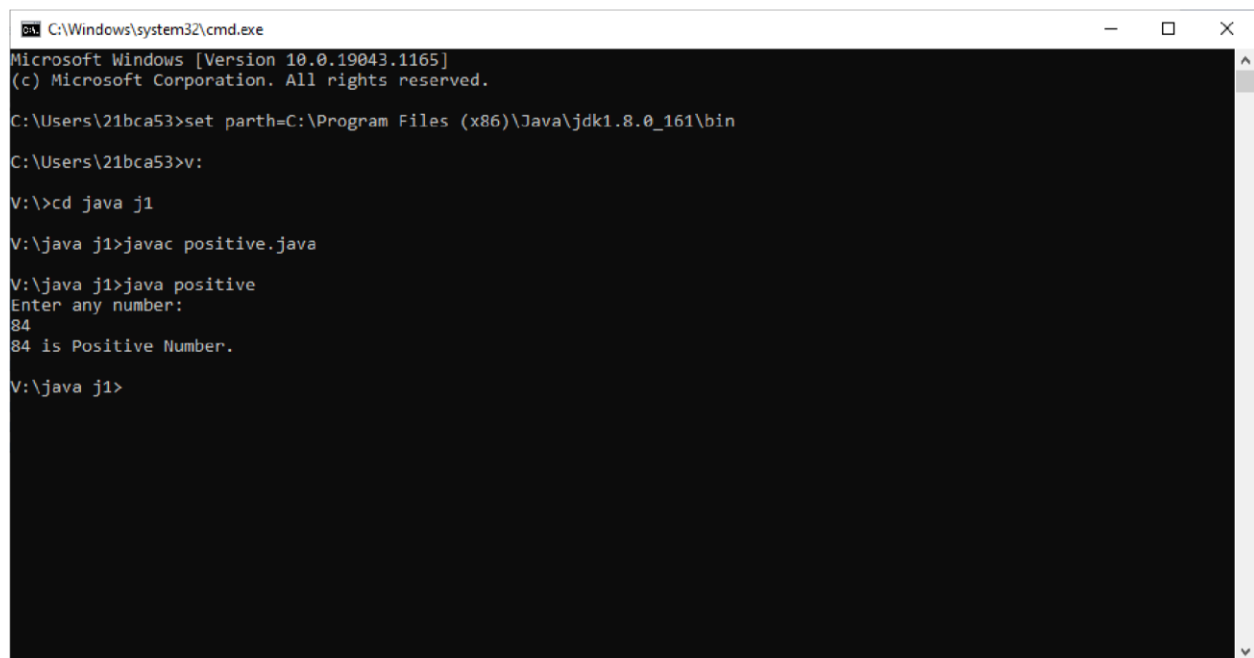
```
C:\Windows\system32\cmd.exe                                       —   □   ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac simpleinterest2.java

V:\java j1>java simpleinterest2
Enter value of principal Amount:
54
Enter value of rate:
5654
Enter value of number of month:
5654
The simpleinterest2 is:17262566

V:\java j1>
```

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

```
import java.util.Scanner; class
positive
{
     public static void main(String args[])
     {
          int a;
          Scanner s=new Scanner(System.in);
System.out.println("Enter any number:");
a=s.nextInt();          if(a>0)
               System.out.println(a+" is Positive Number.");
          else
               System.out.println(a+" is Nagative Number.");
     }
}
```

```
C:\Windows\system32\cmd.exe                                    —    □    ×
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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac positive.java

V:\java j1>java positive
Enter any number:
84
84 is Positive Number.

V:\java j1>
```

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

import java.util.Scanner; class
leapyear

```
{
    public static void main(String args[])
    {
        int a;
        Scanner s=new Scanner(System.in);
System.out.println("Enter any year:");                a=s.nextInt();
        if(a%4==0)
            System.out.println(a+" is Leapyear.");
        else
            System.out.println(a+" is not Leapyear.");
    }
}
```

```
C:\Windows\system32\cmd.exe                                          —   □   ×

Microsoft Windows [Version 10.0.19043.1165]
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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac leapyear.java

V:\java j1>java leapyear
Enter any year:
542
542 is not Leapyear.

V:\java j1>_
```

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

import java.util.Scanner; class
vowel
{
    public static void main(String args[])

```
      {
            char a;
            Scanner s=new Scanner(System.in);
System.out.println("Enter any character:");
a=s.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("Enter character is Vowel.");            else
            System.out.println("Enter character is Consonant");
      }
}
```

```
C:\Windows\system32\cmd.exe                                          —    □    ×
Microsoft Windows [Version 10.0.19043.1165]
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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac vowel.java

V:\java j1>java vowel
Enter any character:
6554
Enter character is Consonant

V:\java j1>_
```

7)Write a program to reverse a given number using while loop.
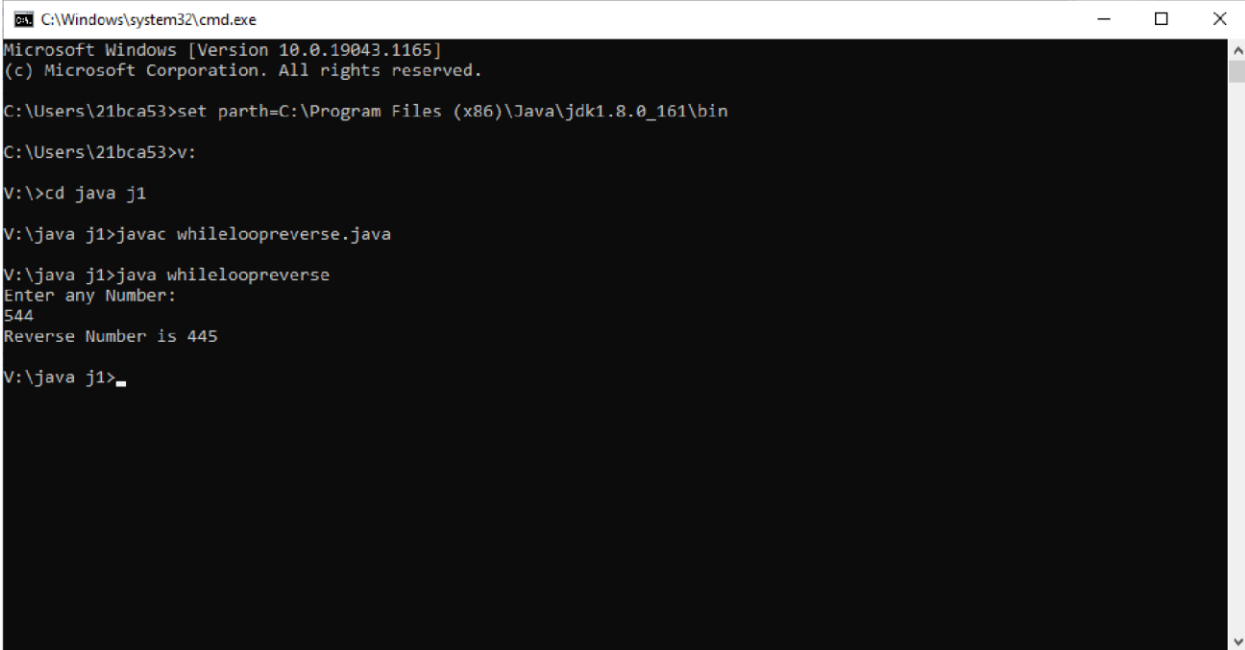
```java
import java.util.Scanner; class
whilelooppreverse
{
      public static void main(String args[])
      {
            int a,r,c=0,b;
            Scanner s=new Scanner(System.in);
System.out.println("Enter any Number:");            a=s.nextInt();
```

```
            b=a;
            while(a>0)
            {
                    r=a%10;
c=c*10+r;
                    a=a/10;
            }
            System.out.println("Reverse Number is " +c);
        }
}
```


8)Write a program to reverse a given number using for loop.
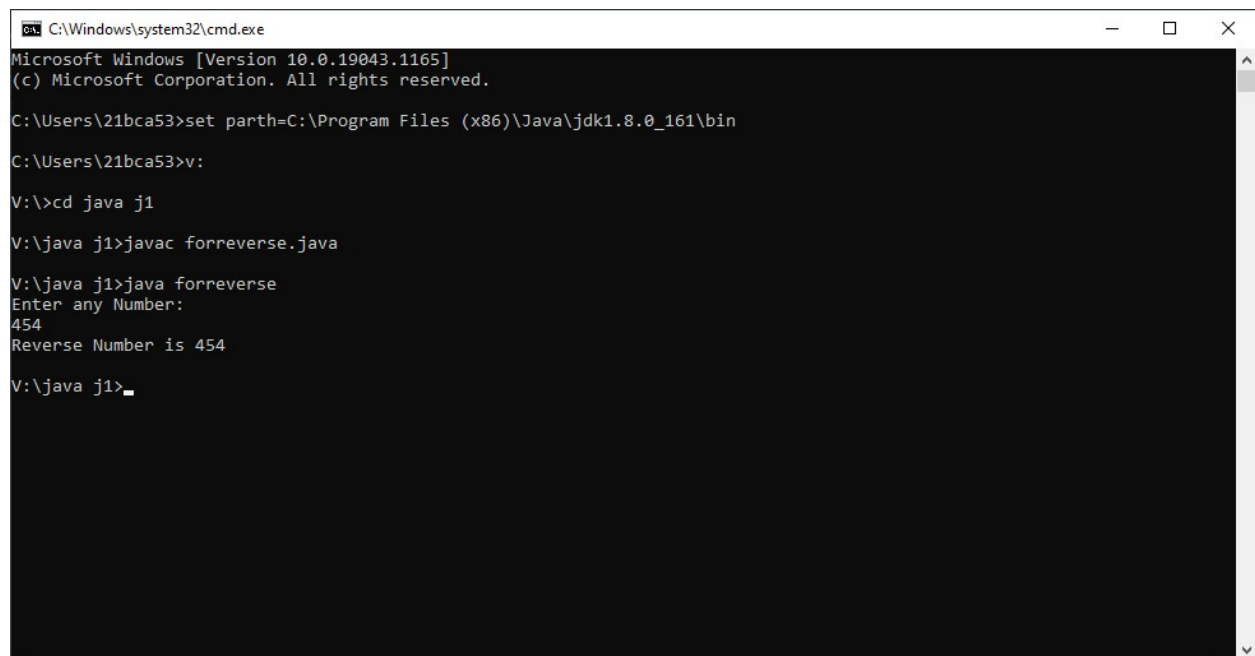
```
import java.util.Scanner; class
forreverse
{
        public static void main(String args[])
        {
                int a,r,c=0,b,i;
                Scanner s=new Scanner(System.in);
System.out.println("Enter any Number:");            a=s.nextInt();
                b=a;
                for(i=0;a>0;i++)
```

```
                {
                        r=a%10;
c=c*10+r;
                        a=a/10;
                }
                System.out.println("Reverse Number is " +c);
        }
}
```

```
C:\Windows\system32\cmd.exe                                              —   □   ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac forreverse.java

V:\java j1>java forreverse
Enter any Number:
454
Reverse Number is 454

V:\java j1>_
```

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

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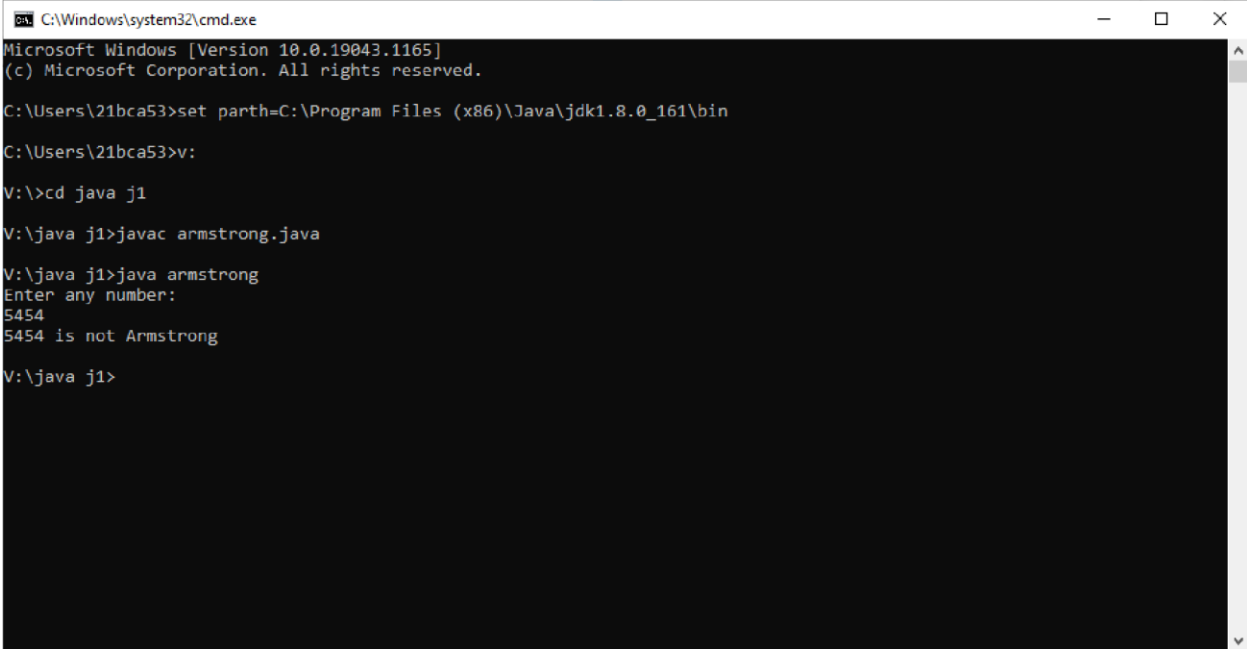
```
                    r=a%10;
c=c+r*r*r;
                    a=a/10;
            }
            if(b==c)
                    System.out.println(b+" is Armstrong");
            else
                    System.out.println(b+" is not Armstrong");
    }
}
```

```
C:\Windows\system32\cmd.exe                                    —   □   ×
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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac armstrong.java

V:\java j1>java armstrong
Enter any number:
5454
5454 is not Armstrong

V:\java j1>
```

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

```
import java.util.Scanner; class
prime
{
    public static void main(String args[])
    {
            int a,i,c=0;
            Scanner s=new Scanner(System.in);
System.out.println("Enter any number:");            a=s.nextInt();
            for(i=2;i<a;i++)
            {
                if(a%i==0)
                {
                    c=1;
```

```
                    break;
            }


        }
        if(c==1)
            System.out.println(a+" is  not Prime Number");
        else
            System.out.println(a+" is Prime Number");
    }
}
```
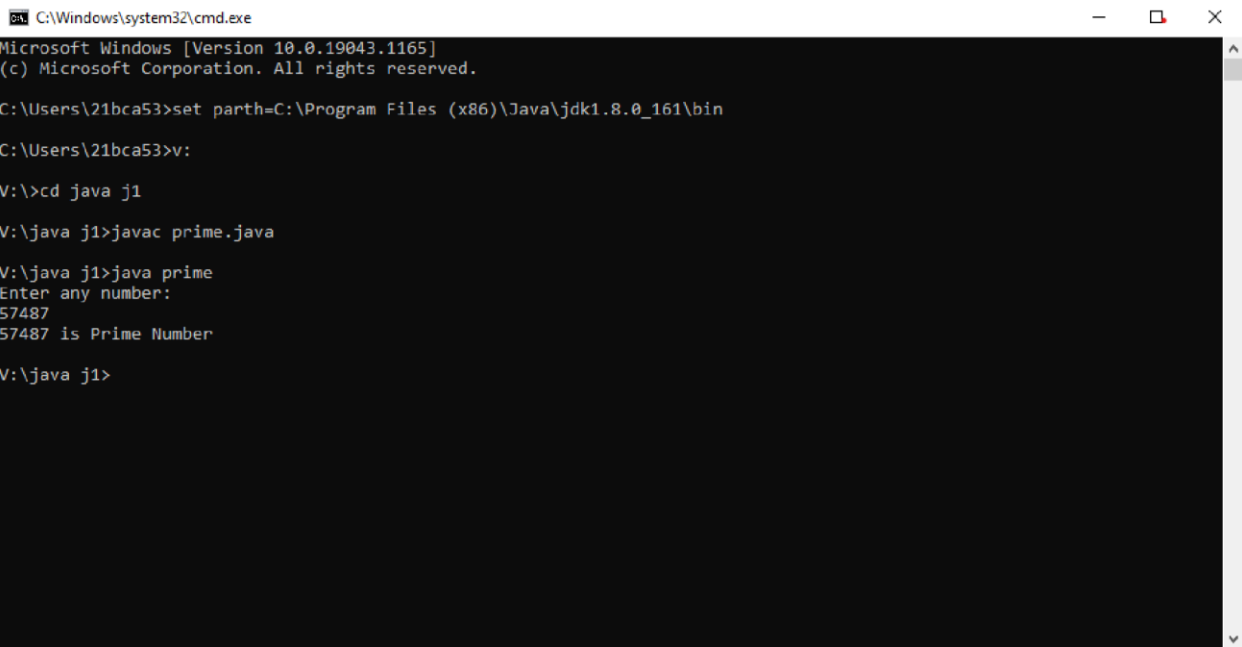
```
C:\Windows\system32\cmd.exe                                                    —    □    ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac prime.java

V:\java j1>java prime
Enter any number:
57487
57487 is Prime Number

V:\java j1>
```

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

*

**

***

****

*****

```java
import java.util.Scanner; class
pattern1
{
        public static void main(String args[])
        {
                int i,j;
                Scanner s=new Scanner(System.in);
                System.out.println("How many row do you want to print:");
for(i=0;i<5;i++)
                {
                        System.out.print(" ");
        for(j=0;j<=i;j++)
System.out.print("* ");
                        System.out.println(" ");
                }
        }
}
```

```
C:\Windows\system32\cmd.exe                                           —   □   ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac pattern1.java

V:\java j1>java pattern1
How many row do you want to print:
 *
 * *
 * * *
 * * * *
 * * * * *

V:\java j1>
```

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
```

```java
import java.util.Scanner; class
pattern2
{
        public static void main(String args[])
        {
                int r,i,j,counter=1;
                 Scanner s=new Scanner(System.in);
                System.out.println("Enter any number:");
 r=s.nextInt();
                for(i=0;i<r;i++)
        {

                for(j = 0;j < r-i-1;j++)
                {
                                System.out.print(" ");
                }
                for(int k = 0;k<=i;k++)
                {
                                System.out.print(counter+" ");
                                counter++;
                 }
                System.out.println();
                }
}
}
```

```
C:\Windows\system32\cmd.exe                                    —  □  ✕

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac pattern2.java

V:\java j1>java pattern2
Enter any number:
10
           1
         2 3
        4 5 6
      7 8 9 10
    11 12 13 14 15
   16 17 18 19 20 21
  22 23 24 25 26 27 28
 29 30 31 32 33 34 35 36
37 38 39 40 41 42 43 44 45
46 47 48 49 50 51 52 53 54 55

V:\java j1>_
```

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
pattern3
{
        public static void main(String args[])
        {
int a,i,j=0;  char c;
        Scanner s=new Scanner(System.in);
System.out.println("Enter any number:");
        a=s.nextInt();
for(j=a;j>=1;j--)
{
                c='A';
                for(i=1;i<=j;i++)
        {
                System.out.print(c+" ");
                c++;
        }
                System.out.println("\n");
        }
}
}
```
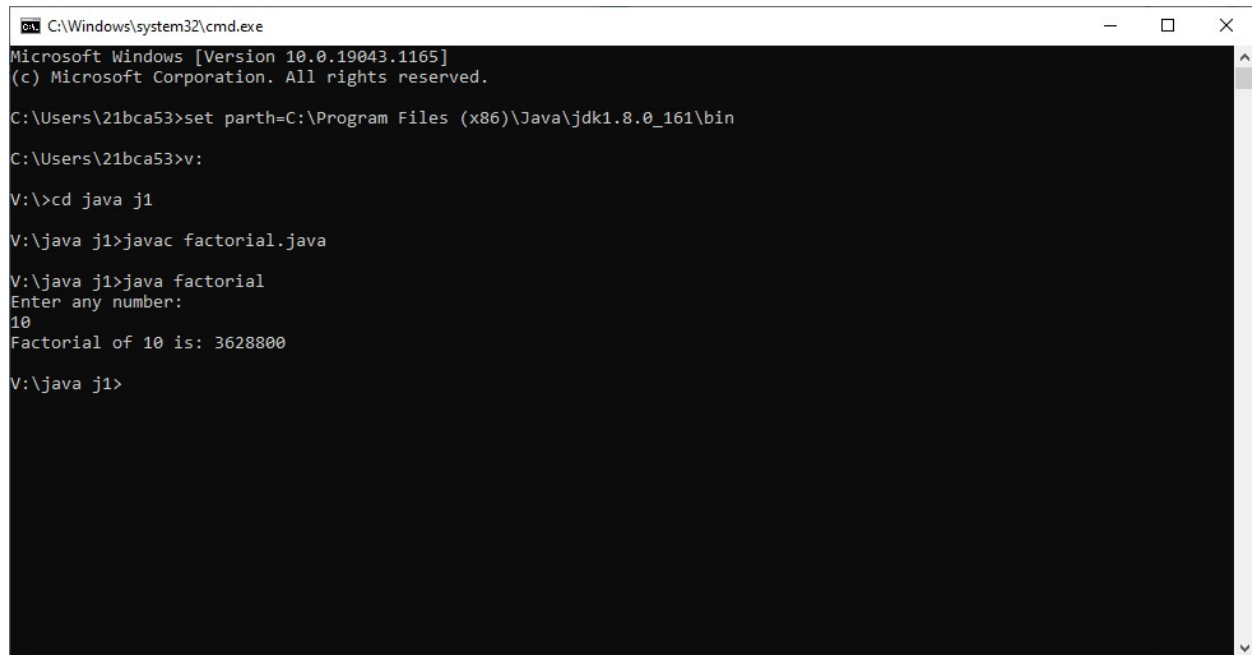
```
C:\Windows\system32\cmd.exe                                          —   □   ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac pattern3.java

V:\java j1>java pattern3
Enter any number:
42
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d e f g h i j

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d e f g h i

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d e f g h

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d e f g

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d e f

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d e

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c d

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [ \ ] ^ _ ` a b c
```

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

```
import java.util.Scanner;
class factorial
{
    public static void main(String args[])
    {
        int a,i,fact=1;
        Scanner s=new Scanner(System.in);
System.out.println("Enter any number:");        a=s.nextInt();

        for(i=1;i<=a;i++)
        {
            fact=fact*i;
        }
        System.out.println("Factorial of "+a+" is: "+fact);
    }
}
```

```
C:\Windows\system32\cmd.exe                                    —    □    ×

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac factorial.java

V:\java j1>java factorial
Enter any number:
10
Factorial of 10 is: 3628800

V:\java j1>
```

16)Write a program to display Fibonacci series import

java.util.Scanner;

class fibonacci

{

   public static void main(String args[])

  {

    int a,b=0,c=1,k,i;

    Scanner s=new Scanner(System.in);
System.out.println("Enter any number:");
a=s.nextInt();   System.out.print(b+"
"+c);

    for(i=2;i<a;++i)

    {
k=b+c;

     System.out.print(" "+k);
b=c;   c=k;

   }   }

}

```
C:\Windows\system32\cmd.exe                                          —    □    ✕

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C:\Users\21bca53>set parth=C:\Program Files (x86)\Java\jdk1.8.0_161\bin

C:\Users\21bca53>v:

V:\>cd java j1

V:\java j1>javac fibonacci.java

V:\java j1>java fibonacci
Enter any number:
12
0 1 1 2 3 5 8 13 21 34 55 89
V:\java j1>_
```