NAME – KASYAP VARANASI

REGISTRATION NUMBER – 20BCE7315

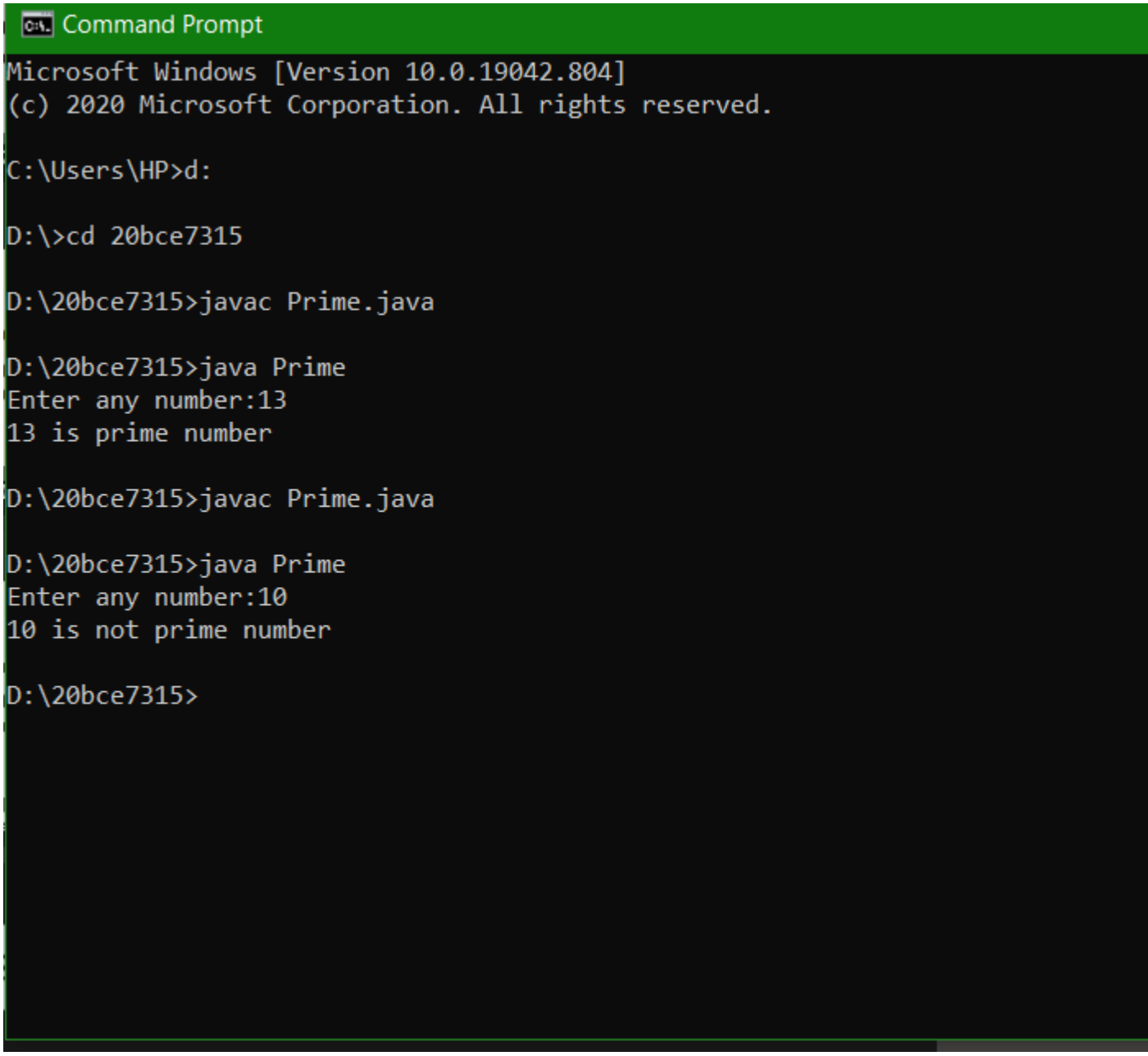
Q1. write a program to check whether given number is prime or not using recursion.

CODE

```
import java.util.Scanner;
public class Prime
{
   public static void main(String[] args)
   {
      int n, x;
      Scanner s = new Scanner(System.in);
      System.out.print("Enter any number:");
      n = s.nextInt();
      Prime obj = new Prime();
      x = obj.prime(n, 2);
      if(x == 1)
      {
         System.out.println(n+" is prime number");
      }
      else
      {
         System.out.println(n+" is not prime number");
      }
   }
   int prime(int y,int i)
   {
       if(i < y)
      {
         if(y % i != 0)
         {
            return(prime(y, ++i));
```

```
        }
        else
        {
            return 0;
        }
      }
      return 1;
   }
}
```

OUTPUT



Q2. Write a program to find reverse of a number 'n" using recursion.

CODE

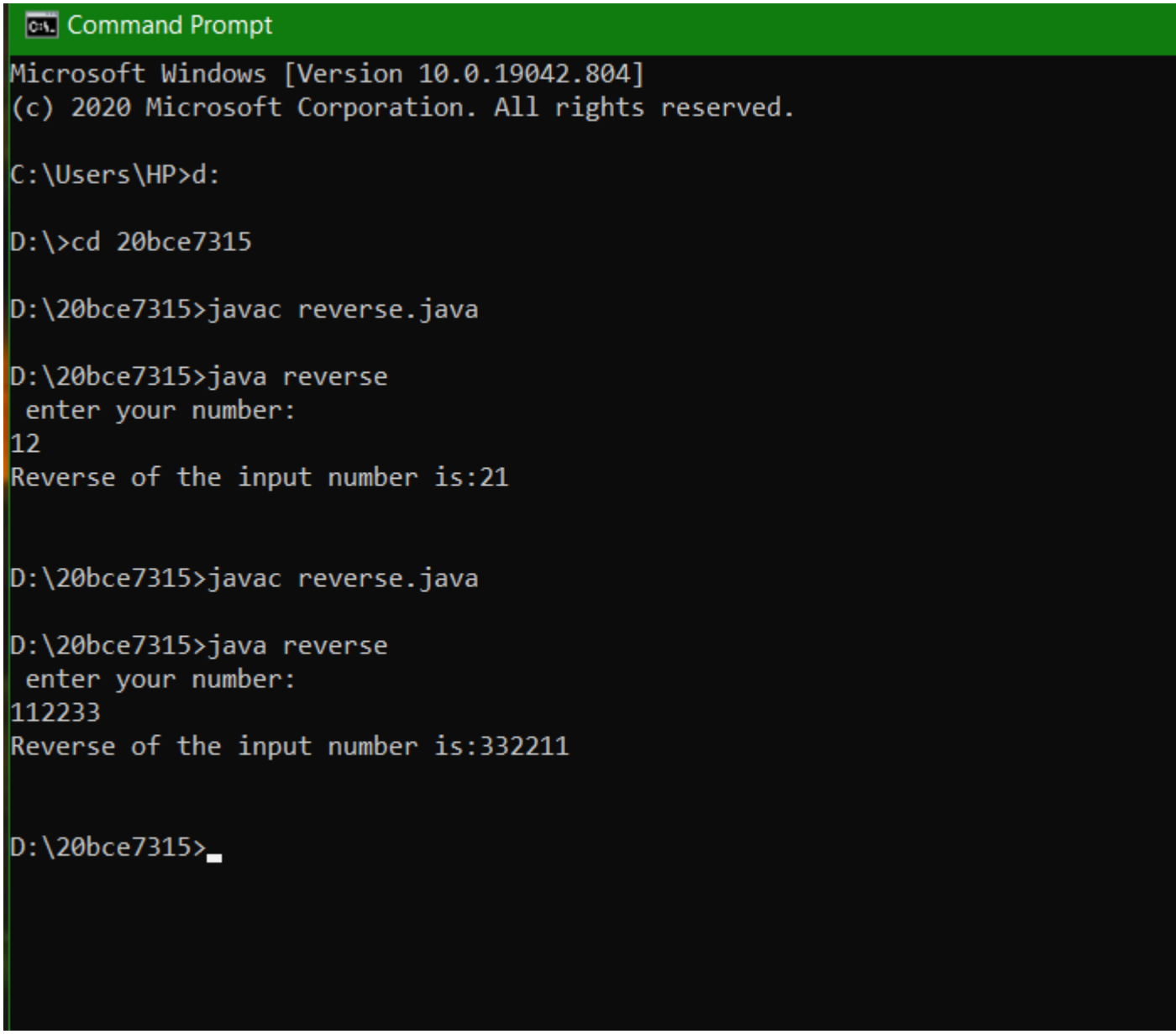
```
import java.util.Scanner;
```

```
class reverse
{

  public static void reverseMethod(int number) {
     if (number < 10) {
            System.out.println(number);
            return;
     }
     else {
        System.out.print(number % 10);


        reverseMethod(number/10);
     }
  }
  public static void main(String args[])
  {
          int num=0;
          System.out.println(" enter your number: ");
          Scanner in = new Scanner(System.in);
          num = in.nextInt();
          System.out.print("Reverse of the input number is:");
          reverseMethod(num);
          System.out.println();
  }
}
```

OUTPUT


Command Prompt
Microsoft Windows [Version 10.0.19042.804]
(c) 2020 Microsoft Corporation. All rights reserved.
C:\Users\HP>d:
D:\>cd 20bce7315
D:\20bce7315>javac reverse.java
D:\20bce7315>java reverse
enter your number:
12
Reverse of the input number is:21
D:\20bce7315>javac reverse.java
D:\20bce7315>java reverse
enter your number:
112233
Reverse of the input number is:332211
D:\20bce7315>