23BAI1035-BCSE103E-Java

Date:29-07-2024

GitHub Link: https://github.com/Nity05/Java-Sub.git

1)**To check Armstrong Number**

Code:

```
import java.util.Scanner;
public class Arm{
   public static void main(String args[]){
      Scanner s=new Scanner(System.in);
      System.out.print("Enter the upper limit: ");
      int x=s.nextInt();
      System.out.print("Enter the lower limit: ");
      int y=s.nextInt();
      for(int i=x;i<=y;i++){
      int m=i;
      int p=i;
      int c=0;
      while(m!=0){
         m/=10;
         c++;
      }
      int b;
```

```
        int sum=0;
        while(p!=0){
            b=p%10;
            sum+=Math.pow(b,c);
            p/=10;
        }
        if(sum==i){
            System.out.println("The "+i+" is a armstrong number");
        }
    }
}
}
```

Output

```
PS C:\Nithish\College\coding\java\Java
-Sub\Day6> javac Arm.java
PS C:\Nithish\College\coding\java\Java
-Sub\Day6> java Arm
Enter the upper limit: 150
Enter the lower limit: 410
The 153 is a armstrong number
The 370 is a armstrong number
The 371 is a armstrong number
The 407 is a armstrong number
```

2)To Print a Square Star Pattern

Code:

```
import java.util.*;
```

```
public class pat{
    public static void main(String args[]){
        Scanner s=new Scanner(System.in);
        System.out.print("Enter the length of side of square: ");
        int n=s.nextInt();
        for(int i=0;i<n;i++){
            System.out.print("*");
        }
        System.out.println();
        for(int i=0;i<n-2;i++){
            System.out.print("*");
            for(int j=0;j<n-2;j++){
                System.out.print(" ");}
                System.out.println("*");
        }
        for(int i=0;i<n;i++){
            System.out.print("*");
        }
    }
}
```

Output

```
PS C:\Nithish\College\coding\java\Java
-Sub\Day6> javac pat.java
PS C:\Nithish\College\coding\java\Java
-Sub\Day6> java pat
Enter the length of side of square: 5
*****
*   *
*   *
*   *
*****
```

3)To find LCM of two numbers

Code

```
import java.util.Scanner;
public class Lcm{
   public static void main(String args[]){
      Scanner s=new Scanner(System.in);
      System.out.print("Enter the first number: ");
      int n1=s.nextInt();
      System.out.print("Enter the second number: ");
      int n2=s.nextInt();
      int r=0;
      r+=Math.max(n1,n2);
      while (true) {
         if((r%n1==0)&&(r%n2==0)){
            break;}
         r++;
      }
```

```
        System.out.println("The LCM of the numbers "+n1+" and "+n2+" is: "+r);
    }
}
```

Output

```
PS C:\Nithish\College\coding\java\Java-Sub\Day
6> javac Lcm.java
PS C:\Nithish\College\coding\java\Java-Sub\Day
6> java Lcm
Enter the first number: 81
Enter the second number: 72
The LCM of the numbers 81 and 72 is: 648
PS C:\Nithish\College\coding\java\Java-Sub\Day
6>
```