23BAI1117 – BCSE103E – Java

29/07/2024 – Day3 – Theory

https://github.com/sriram-s-23BAI1117/javap

1)

```java
import java.util.Scanner;

public class Armstrong{
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int a=input.nextInt();
        int b=input.nextInt();
        for (int i=a;i<=b;i++){
            int k=0,num=i,sum=0;
            while (num>0){
                k=num%10;
                sum+=k*k*k;
                num=num/10;
            }
            if (sum==i){
                System.out.println(i+" is an Armstrong number.");
            }
        }
        input.close();
    }
}
```

```
PS D:\javap\javap>  d:; cd 'd:\javap\javap';
AppData\Roaming\Code\User\workspaceStorage\d
100
1000
153 is an Armstrong number.
370 is an Armstrong number.
371 is an Armstrong number.
407 is an Armstrong number.
```

2)

```java
public class Pattern {
    public static void main(String[] args) {

        int n1=8,n2 = 22;
        for (int i=0;i<n1;i++){
            System.out.print("*");
```

```
            for (int j=1;j<n2-1;j++){
                if (i==0){
                    System.out.print("*");
                }
                else if (i==n1-1){
                    System.out.print("*");
                }
                else{
                    System.out.print(" ");
                }
            }
            System.out.println("*");
        }
    }
}
```

```
PS D:\javap\javap>  d:; cd 'd:\javap
sers\srira\AppData\Roaming\Code\User
**********
*        *
*        *
*        *
*        *
*        *
*        *
**********
```

3)

```
import java.util.Scanner;

public class LCM {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        int n1 = input.nextInt();
        int n2 = input.nextInt();
        int num = (n1>n2)? n1:n2;
        while (true){
            if (num%n1==0 && num%n2==0){
                break;
            }
            num++;
        }
        input.close();
        System.out.printf("The LCM of %d and %d is %d",n1,n2,num);
```

```
    }
}
```

```
PS D:\javap\javap>  d:; cd 'd:\javap
sers\srira\AppData\Roaming\Code\User
12 13
The LCM of 12 and 13 is 156
```