1.Armstrong Number

```
import java.util.*;
class HelloWorld {
  public static int digit(int n){
    int c=0;
    while (n>0){
      c+=1;
      n=n/10;
    }
    return c;
  }
  public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    System.out.printf("Enter a number:");
    int a=sc.nextInt();
    int res=digit(a);
    int temp=a;
    int rem;
    int sum=0;
    while (temp>0){
      rem=temp%10;
      sum+=Math.pow(rem,res);
      temp=Math.floorDiv(temp,10);
    }
    if(sum == a){
      System.out.println("Given number is a armstrong");
    }else{
      System.out.println("Given number is not a armstrong");
    }
  }
```

```
}
```

```
C:\Users\nivit\Desktop>javac HelloWorld.java

C:\Users\nivit\Desktop>java HelloWorld

Enter a number:1441

Given number is not a armstrong

C:\Users\nivit\Desktop>javac HelloWorld.java

C:\Users\nivit\Desktop>java HelloWorld

Enter a number:153

Given number is a armstrong
```

2. Generating a pattern

```
import java.util.Scanner;
class Pattern {
  public static void main(String[] args) {
    Scanner test=new Scanner(System.in);
    int N=test.nextInt();
    for(int i=0;i<N;i++){
       for(int j=0;j<N;j++){
         if((i==0 | | i==N-1) | | ( j==0 | | j==N-1)){
           System.out.printf("* ");
         }
         else{
           System.out.printf(" ");
         }
       }
       System.out.printf("\n");
    }
  }
}
```

3.Finding LCM

```
import java.util.Scanner;
class Pattern {
  public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    System.out.printf("Enter a number:");
    int a =sc.nextInt();
    System.out.printf("Enter a number:");
    int b =sc.nextInt();
    int hcf=1;
    if(a>b){}
      for(int i=1;i<=b;i++){
        if((a\%i==0) \&\&(b\%i==0)){
           hcf=i;
        }
      }
    }else{
      for(int i=1;i<=a;i++){
        if((a\%i==0) \&\&(b\%i==0)){
           hcf=i;
        }
      }
    }
```

```
int lcm=(a*b)/hcf;
System.out.println("The Lcm of two is "+lcm);
}

PS C:\Users\nivit\downloads> javac Pattern.java
PS C:\Users\nivit\downloads> java Pattern
Enter a number:18
Enter a number:27
The Lcm of two is 54
```