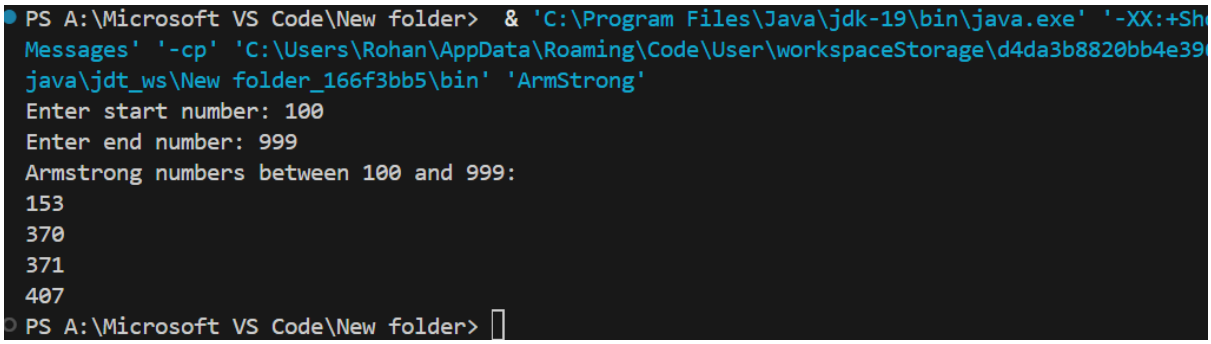
Assignment 1

```
import java.util.Scanner;


public class ArmStrong {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter start number: ");
        int start = scanner.nextInt();
        System.out.print("Enter end number: ");
        int end = scanner.nextInt();
        System.out.println("Armstrong numbers between " + start + " and " + end + ":");
        printArmStrongNumbers(start, end);
        scanner.close();
    }
    public static void printArmStrongNumbers(int start, int end) {
        for (int i = start; i <= end; i++) {
            int sum = 0;
            int originalNumber = i;
            while(originalNumber > 0){
                int digit = originalNumber % 10;
                int power = 1;
                for(int j = 0; j < 3; j++){
                    power *=digit;
                }
                sum += power;
                originalNumber /= 10;
            }
            if(sum == i){
                System.out.println(i + " ");
            }
```

```
    }
  }
}
```

OUTPUT:



Assignment 2

```
import java.util.Scanner;


public class EmpSalary {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int choice = 1;
        int i = 1;
        while(choice == 1){
            System.out.print("Enter Employee Basic Salary: ");
            double basicSalary = scanner.nextDouble();
            double HRA, DA;
            if(basicSalary > 15000){
                HRA = basicSalary * 0.20;
                DA = basicSalary * 0.60;
```

```
        } else {
            HRA = basicSalary * 0.20;
            DA = basicSalary * 0.60;
        }
        double grossSalary = basicSalary + HRA + DA;
        System.out.println("Employee " + i + " Gross Salary: " + grossSalary);
        i++;
        System.out.print("Do you want to enter another employee? (1 for Yes): ");
        choice = scanner.nextInt();
      }
      scanner.close();
   }
}
```

OUTPUT:

```
PS A:\Microsoft VS Code\New folder>  & 'C:\Program Files\Java\jdk-19\bin\java.
Messages' '-cp' 'C:\Users\Rohan\AppData\Roaming\Code\User\workspaceStorage\d4d
java\jdt_ws\New folder_166f3bb5\bin' 'EmpSalary'
Enter Employee Basic Salary: 10000
Employee 1 Gross Salary: 18000.0
Do you want to enter another employee? (1 for Yes): 1
Enter Employee Basic Salary: 20000
Employee 2 Gross Salary: 36000.0
Do you want to enter another employee? (1 for Yes): 1
Enter Employee Basic Salary: 200000
Employee 3 Gross Salary: 360000.0
Do you want to enter another employee? (1 for Yes): 2
PS A:\Microsoft VS Code\New folder>
```

Assignment 3

```
import java.util.Scanner;


public class evenOdd {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int oddNo = 0;
        int evenNo = 0;
        System.out.print("Enter numbers(-1 to stop): ");
        int number = scanner.nextInt();
        while (number != -1) {
            if (number % 2 == 0) {
                evenNo++;
            } else {
                oddNo++;
            }
            number = scanner.nextInt();
        }
        System.out.println("Total even numbers: " + evenNo);
        System.out.println("Total odd numbers: " + oddNo);
   scanner.close();
    }
}
```

OUTPUT: