Assignment 3

Write a program to add 8 to the number x and then divide it by 3. Now, the modulus of the quotient
is taken with 5 and then multiply the resultant value by 5. Display the final result.

```java
import java.util.Scanner;

public class Main{
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);
        int x = sc.nextInt();
        System.out.println((((x+8)/3)%5)*5);
}
}
```

2.- Swap two numbers without the use of third variable.

```java
import java.util.Scanner;

public class swap {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter 1st number");
        int x = sc.nextInt();
        System.out.println("Enter 2nd number");
        int y = sc.nextInt();
        x = x + y;
        y = x - y;
        x = x - y;
        System.out.println(x);
        System.out.println(y);
}
}
```

3. Write a program to calculate the sum of the digits of a 3-digit number.

```java
import java.util.Scanner;
public class sum {
    public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int x = scn.nextInt();
    int sum = 0;
    while(x > 0){
    sum += x % 10;
    x /= 10;
}
    System.out.println(sum);
}
}
```

- Find the total number of bits needed to be flipped to convert x to y.

```java
import java.util.Scanner;
public class idea {
public static void main(String[] args) {
Scanner scn = new Scanner(System.in);
int x = scn.nextInt();
int y = scn.nextInt();
int n = x ^ y;
int count = 0;
while (n != 0){
n = n & (n - 1);
count++;
}
System.out.print(count);
}
}
```