Q.7

```java
public class Operators {
    public static void main(String[] args) {
        int a = 10, b = 2;
        System.out.println(x: "--Arithmetic Operators--");
        System.out.println("a + b = " + (a+b));
        System.out.println("a - b = " + (a-b));
        System.out.println("a * b = " + (a*b));
        System.out.println("a / b = " + (a/b));
        System.out.println("a % b = "+ (a%b));

        System.out.println(x: "\n--Relational Operators--");
        System.out.println("a > b: " + (a>b));
        System.out.println("a < b: " + (a<b));
        System.out.println("a == b: " + (a==b));
        System.out.println("a >= b: " + (a>=b));
        System.out.println("a <= b: " + (a<=b));

        System.out.println(x: "\n--Logical Operators--");
        Boolean x = true, y = false;
        System.out.println("AND: " + (x && y));
        System.out.println("OR:  " + (x || y));
        System.out.println("NOT: " + (!x));
    }
}
```

```
--Arithmetic Operators--
a + b = 12
a - b = 8
a * b = 20
a / b = 5
a % b = 0
PS C:\Users\lenovo\Desktop\Java\Assignment> cd "c:\Users\lenovo\Desktop\Java\Assig
--Arithmetic Operators--
a + b = 12
a - b = 8
a * b = 20
a / b = 5
a == b: false
a >= b: true
a <= b: false

--Logical Operators--
AND: false
OR:  true
NOT: false
```

Assignment 2

Q1.

```
Scanner sc = new Scanner(System.in);
int z = sc.nextInt();
if(z%2==0){
    System.out.printf(format: "%d is a even number ", z);
}
else{
    System.out.println(x: "Odd num");
}
```

Q2.

```
import java.util.Scanner;
public class Marks {
    public static void main(String[] args) {
        int[] marks = new int[5];
        int totalMarks = 0, avg;
        Scanner sc = new Scanner(System.in);
        System.out.println(x: "Enter marks out of 100");
        for (int i = 0; i < 5; i++) {
            System.out.printf(format: "Subject %d: ", i + 1);
            marks[i] = sc.nextInt();
            totalMarks += marks[i];
        }
        avg = totalMarks/5;
        System.out.printf(format: "Total marks out of 500: %d\n", totalMarks);
        System.out.printf(format: "Total percentage: %d\n ", avg);
        System.out.println(x: "--Student Grade--");
        if(avg >= 80){
            System.out.println(x: "Honours");
        }
        else if(avg>= 60 && avg <= 79){
            System.out.println(x: "First Division");
        }
        else if(avg>=50 && avg <= 59){
            System.out.println(x: "Second Divison");
        }
        else if(avg>=40 && avg <= 49){
            System.out.println(x: "Third Divison");
        }
        else{
            System.out.println(x: "Failed");
        }
    }
}
```

```
Enter marks out of 100
Subject 1: 78
Subject 2: 55
Subject 3: 43
Subject 4: 39
Subject 5: 80
Total marks out of 500: 295
Total percentage 59:
 --Student Grade--
Second Divison
```

Q3.

```java
import java.util.Scanner;

public class Reverse {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int num, remainder, reverse=0;
        num = 12345;
        while(num != 0){
            remainder = num%10;
            reverse = (reverse * 10) + remainder;
            num /=10;
        }
        System.out.println("Reversed: " + reverse);
    }
}
```

```java
import java.util.Scanner;
class Bank {
    Scanner sc = new Scanner(System.in);
    private String name;
    private int accNo;
    private String accType;
    private long balance;
    Bank() {
        System.out.println(x: "Enter Account holder name: ");
        name = sc.nextLine();
        System.out.println(x: "Enter Account No: ");
        accNo = sc.nextInt();
        System.out.println(x: "Enter Account type: ");
        accType = sc.next();
        System.out.println(x: "Enter Initial Balance: ");
        balance = sc.nextLong();
    }
    void deposit() {
        System.out.println(x: "Enter deposit Amount: ");
        int amount = sc.nextInt();
        balance += amount;
        System.out.println("Balance after deposit: " + balance);
    }
    void withdraw() {
        System.out.println(x: "Enter Withdrawal Amount: ");
        int withdraw = sc.nextInt();
        if (balance > withdraw) {
            balance -= withdraw;
            System.out.println("Balance after withdrawal: " + balance);
        } else {
            System.out.println(x: "Insufficient balance");
        }
    }
    void display() {
```

```
    void display() {
        System.out.printf(format: "Name: %s Account No: %d Type: %s\n", name, accNo, accType);
        System.out.println("Balance: " + balance);
    }
}
public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        Bank obj = new Bank();
        boolean b = true;
        while (b) {
            System.out.println(x: "Choose from Options\n1.Deposit\n2.Witdrawl\n3.Balance Enquiry\n4.Exit");
            int choice = sc.nextInt();
            if (choice == 1) {
                obj.deposit();
            } else if (choice == 2) {
                obj.withdraw();
            } else if (choice == 3) {
                obj.display();
            } else if (choice == 4) {
                b = false;
                System.out.println(x: "Thanks for Banking with us");
            } else {
                System.out.println(x: "Invalid input");
                b = false;
            }
        }
    }
}
```

```
Enter Account holder name:
Arbaaz
Enter Account No:
9832
Enter Account type:
Current
Enter Initial Balance:
20000
Choose from Options
1.Deposit
2.Witdrawl
3.Balance Enquiry
4.Exit
2
Enter Withdrawal Amount:
10000
Balance after withdrawal: 15000
Choose from Options
1.Deposit
2.Witdrawl
3.Balance Enquiry
4.Exit
3
Name: Arbaaz Account No: 9832 Type: Current
Balance: 15000
Choose from Options
1.Deposit
2.Witdrawl
3.Balance Enquiry
4.Exit
4
Thanks for Banking with us?
```