SPG 0453

SECURE OBJECT-ORIENTED PROGRAMMING

TASK CHAPTER:

NUMBER OF CHAPTER HERE

DATE OF SUBMISSION:

EDIT DATE HERE

PREPARED BY:

NUR ARAIN ERSYANI BINTI ABDULLAH MOHD KHAIRUL

NIZAM (SWE23070455)

PREPARED FOR:

MS AININ SOFIYA

Task 1

```
rce    History    |
import java.util.Scanner;

public class ArithmeticProg {
    public static void main(String[] args) {
        Scanner os = new Scanner(System.in);

        System.out.print("Enter the first integer: ");
        int num1 = os.nextInt();

        System.out.print("Enter the second integer: ");
        int num2 = os.nextInt();


        int sum = num1 + num2;
        System.out.println("Sum: " + sum);


        int sub = num1 - num2;
        System.out.println("sub: " + sub);


        int multi = num1 * num2;
        System.out.println("multi: " + multi);


        int Modulus = num1 % num2;
        System.out.println("Modulus: " + Modulus);
```

```
        int multi = num1 * num2;
        System.out.println("multi: " + multi);


        int Modulus = num1 % num2;
        System.out.println("Modulus: " + Modulus);

        int x = num1;
        ++x;
        System.out.println("Increment :"+x);

        int y = num2;
        --y;
        System.out.println("Decrement :"+y);


        os.close();
    }
}
```
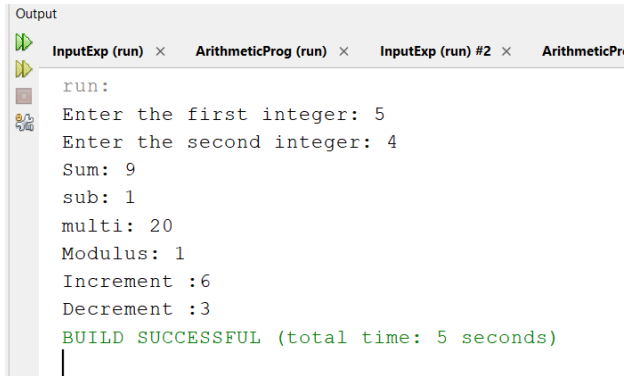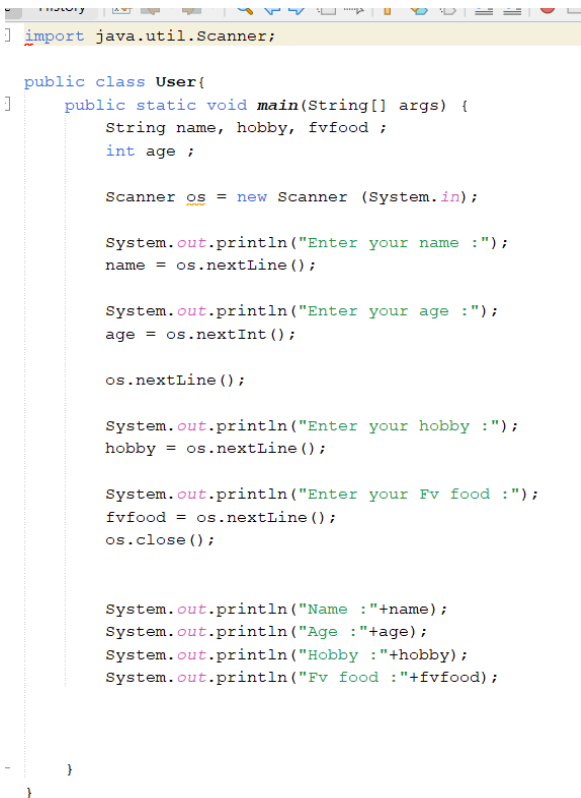
Task 4

InputExp (run) ×   **ArithmeticProg (run)** ×   **InputExp (run) #2** ×   **ArithmeticPr**

```
run:
Enter the first integer: 5
Enter the second integer: 4
Sum: 9
sub: 1
multi: 20
Modulus: 1
Increment :6
Decrement :3
BUILD SUCCESSFUL (total time: 5 seconds)
```

Task 2

```java
import java.util.Scanner;

public class User{
    public static void main(String[] args) {
        String name, hobby, fvfood ;
        int age ;

        Scanner os = new Scanner (System.in);

        System.out.println("Enter your name :");
        name = os.nextLine();

        System.out.println("Enter your age :");
        age = os.nextInt();

        os.nextLine();

        System.out.println("Enter your hobby :");
        hobby = os.nextLine();

        System.out.println("Enter your Fv food :");
        fvfood = os.nextLine();
        os.close();


        System.out.println("Name :"+name);
        System.out.println("Age :"+age);
        System.out.println("Hobby :"+hobby);
        System.out.println("Fv food :"+fvfood);


    }
}
```
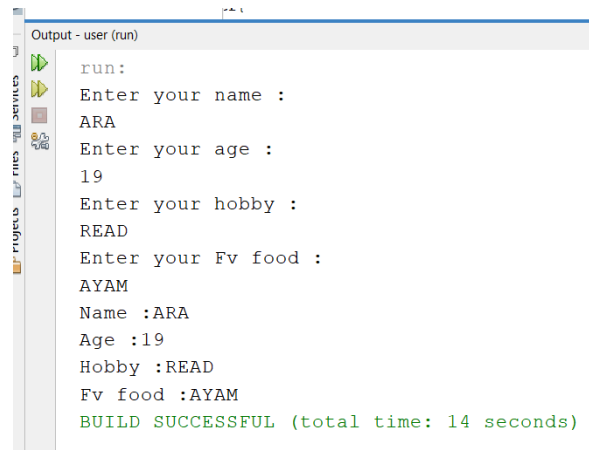
Output - user (run)

```
run:
Enter your name :
ARA
Enter your age :
19
Enter your hobby :
READ
Enter your Fv food :
AYAM
Name :ARA
Age :19
Hobby :READ
Fv food :AYAM
BUILD SUCCESSFUL (total time: 14 seconds)
```

Task3

Task 4

```
 2
 3
 4   import java.util.Scanner;
 5   public class UserAge{
 6
 7       public static void main(String[] args) {
 8       Scanner os = new Scanner(System.in);
 9       int currentyear, age, birthyear;
10       currentyear = 2024;
11
12       System.out.println("Insert your birthyear :");
13       birthyear = os.nextInt();
14       age = currentyear - birthyear ;
15       System.out.println("Birthyear: " + birthyear);
16       System.out.println("Current year: 2024 ");
17       System.out.println("Age: " + age);
18       }
19   }
```

Task 4

```java
import java.util.Scanner;
public class Marks{

        public static void main(String[] args) {

        Scanner os = new Scanner(System.in);
        String name,id, subject;
        int marks,test1,test2;


        System.out.println("Enter your name :");
        name = os.nextLine();

        System.out.println("Enter your id :");
        id = os.nextLine();

        System.out.println("Enter your subject :");
        subject = os.nextLine();

        System.out.print("Insert your test1: ");
        test1 = os.nextInt();

        System.out.print("Insert your test2: ");
        test2 = os.nextInt();


        marks = (test1 + test2)/2;
        System.out.println("marks: " +marks);



        System.out.println("Name : " +name);
        System.out.println("Id :   " +id);
        System.out.println("Subject: " +subject);
        System.out.println("average marks : " +marks);


    }
}
```
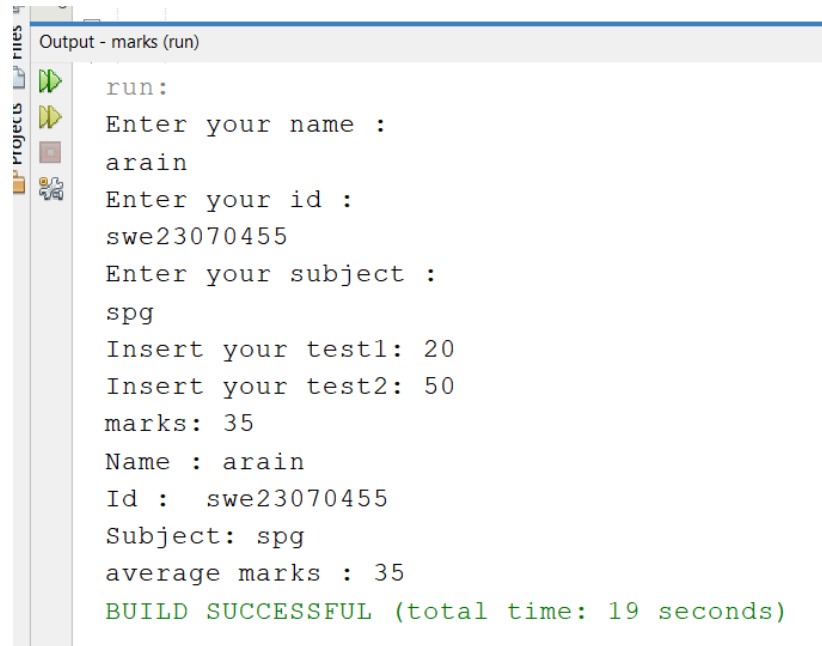
Task 4

```
run:
Enter your name :
arain
Enter your id :
swe23070455
Enter your subject :
spg
Insert your test1: 20
Insert your test2: 50
marks: 35
Name : arain
Id :   swe23070455
Subject: spg
average marks : 35
BUILD SUCCESSFUL (total time: 19 seconds)
```

Task 5

```java
import java.util.Scanner;

public class Main

{

public static void main(String[] args) {

    Scanner os =new Scanner(System.in);
    float price,quantity,totalcost,discount ,afterdiscount,discountrate;
    String item;

     System.out.println(" Item = ");
    item = os.nextLine();

     System.out.println("Enter price : ");

        price=os.nextInt();

         System.out.println("Enter quantity: ");

        quantity=os.nextInt();

        totalcost=quantity*price;

        System.out.println("Enter discount rate (%):");
        discountrate = os.nextInt();

        discount= discountrate/100;

        afterdiscount =totalcost-( totalcost*discount);


    System.out.println(" Item :"+item );
    System.out.println("Price of one Item= "+price);
    System.out.println("Total Price = "+totalcost);
    System.out.println("discount = "+discountrate +("%"));
    System.out.println("price after discount = "+afterdiscount);

}

}
```
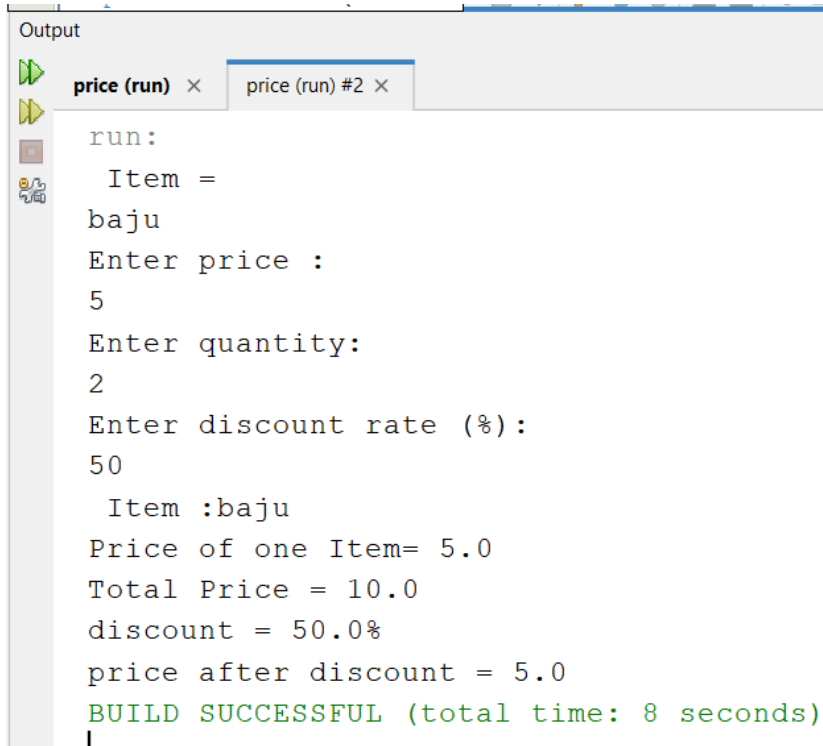
Task 4

price (run) ×   price (run) #2 ×

```
run:
  Item =
baju
Enter price :
5
Enter quantity:
2
Enter discount rate (%):
50
  Item :baju
Price of one Item= 5.0
Total Price = 10.0
discount = 50.0%
price after discount = 5.0
BUILD SUCCESSFUL (total time: 8 seconds)
```

Task 6

```java
import java.util.Scanner;

public class BMI {

    public static void main(String args[]) {

        Scanner os = new Scanner(System.in);
        float weight,height,BMI;

        System.out.print("Input weight in kilogram: ");
        weight = os.nextFloat();

        System.out.print("Input height in meters: ");

        height = os.nextFloat();
        BMI = weight/(height * height);

        System.out.println("The BMI is " +BMI);
    }
}
```

Output

price (run) ×   BMI (run) ×

```
run:
Input weight in kilogram: 49
Input height in meters: 1.51
The BMI is 21.490286
BUILD SUCCESSFUL (total time: 7 seconds)
```

Task 7

```java
import java.util.Scanner;

public class CompountProg {
    public static void main(String[] args) {
        Scanner os = new Scanner(System.in);

        int num1, x , a , y, c ;
        System.out.print("Enter the first integer: ");
        num1 = os.nextInt();

        x = num1;
        x = ++x;
        System.out.println("Prefix Increment :"+x);

        a = num1;
        a = a++;
        System.out.println("Postfix Increment :"+a);

        y = num1;
        y = --y;
        System.out.println("Prefix Decrement :"+y);

        c = num1;
        c = c--;
        System.out.println("Postfix Decrement :"+c);

        os.close();
    }
}
```

Output

price (run) ×   compountProg (run) ×

```
run:
Enter the first integer: 5
Prefix Increment :6
Postfix Increment :5
Prefix Decrement :4
Postfix Decrement :5
BUILD SUCCESSFUL (total time: 2 seconds)
```