Lab 02

Name: Tet Davann

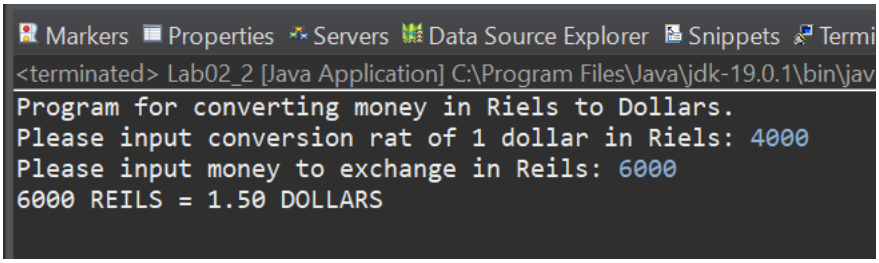
ID: IDTB080023

✓ Lab02.1

```
import java.util.Scanner;

public class lab02_1 {

	public static void main(String[] args) {

		// TODO Auto-generated method stub

		Scanner sc=new Scanner(System.in);

		System.out.print("Input your name: ");

		String name=sc.nextLine();

		System.out.println("Hello "+name);

	}

}
```

✓ Lab02.2

```
import java.util.Scanner;
public class Lab02_2 {
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner sc=new Scanner(System.in);
		System.out.println("Program for converting money in Riels to Dollars.");
		System.out.print("Please input conversion rat of 1 dollar in Riels: ");
		float rate=sc.nextFloat();
		System.out.print("Please input money to exchange in Reils: ");
		int Reils=sc.nextInt();
		float result=Reils/rate;
		System.out.printf("%d REILS = %.2f DOLLARS",Reils,result);
	}

}
```



✓ Lab02.3

```
import java.util.Scanner;
public class Lab02_3 {
	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
```

```
                String[] result=new String[8];
                String[] ask= {
                "Q1. Feeling feverish and/or having chills? ",
                "Q2. Has there been any use of fever reducing medication within the last 24 hours not due to another healthcondition? ",
                "Q3. A new cough that is not due to another health condition? ",
                "Q4. New chills that are not due to another health condition? ",
                "Q5. A new sore throat that is not due to another health condition? ",
                "Q6. A new loss of taste or smell? ",
                "Q7. Have you had a positive test for the virus that causes COVID-19 disease within the past 10 days? ",
                "Q8. In the past 14 days, have you had close contact (within about 6 feet for 15 minutes or more) with someone with suspected or confirmed COVID-19? "
                };
                System.out.println("==== Covid-19 Screen Health ===");
                for(int i=0;i<8;i++) {
                        System.out.print(ask[i]);
                        result[i]=sc.nextLine();
                }
                System.out.println("=================================================");
                System.out.println("| \tQuestions \t| \tAnswers \t|");
                System.out.println("=================================================");
                for(int i=0;i<8;i++) {
                        System.out.println("| Q"+(i+1)+"\t\t\t| "+result[i]+"\t\t\t|");
                        System.out.println("-------------------------------------------------");

                }
        }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console
<terminated> Lab02_3 [Java Application] C:\Program Files\Java\jdk-19.0.1\bin\javaw.exe  (Jan 16, 2023, 5:18:19 PM – 5:18:34 PM) [pid: 25232]
==== Covid-19 Screen Health ===
Q1. Feeling feverish and/or having chills? yes
Q2. Has there been any use of fever reducing medication within the last 24 hours not due to another healthcondition? yes
Q3. A new cough that is not due to another health condition? no
Q4. New chills that are not due to another health condition? yes
Q5. A new sore throat that is not due to another health condition? no
Q6. A new loss of taste or smell? yes
Q7. Have you had a positive test for the virus that causes COVID-19 disease within the past 10 days? yes
Q8. In the past 14 days, have you had close contact (within about 6 feet for 15 minutes or more) with someone with suspected or confirmed COVID-19? no
=================================================
|       Questions       |       Answers         |
=================================================
| Q1                    | yes                   |
-------------------------------------------------
| Q2                    | yes                   |
-------------------------------------------------
| Q3                    | no                    |
-------------------------------------------------
| Q4                    | yes                   |
-------------------------------------------------
| Q5                    | no                    |
-------------------------------------------------
| Q6                    | yes                   |
-------------------------------------------------
| Q7                    | yes                   |
-------------------------------------------------
| Q8                    | no                    |
-------------------------------------------------
```

✓ Lab02.4

```
import java.util.Scanner;
public class Lab02_4 {
        public static void main(String[] args) {
                Scanner sc=new Scanner(System.in);
                System.out.print("Input number of seconds:");
                int second = sc.nextInt();
                int hour=second/3600;
                int minute=(second%3600)/60;
                second=(second%3600)%60;
                System.out.printf("Time corresponding to 1259 seconds is:: %02d:%02d:%02d",hour,minute,second);
        }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets
<terminated> Lab02_4 [Java Application] C:\Program Files\Java\jdk-19.0.1\b
Input number of seconds:12000
Time corresponding to 1259 seconds is:: 03:20:00
```

✓ Lab02.5

```
import java.util.Scanner;
public class Lab02_5 {
        public static void main(String[] args) {
                Scanner sc=new Scanner(System.in);
                float x,y,z;
                System.out.println("Program for calculating equation 1/x = 1/y + 1/z to find value of x");
                System.out.print("Please input y:");
```

```
                y=sc.nextFloat();
                System.out.print("Please input z:");
                z=sc.nextFloat();
                x=1/((1/y)+(1/z));
                System.out.println("Result x = "+x);

        }
}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal  Console
<terminated> Lab02_5 [Java Application] C:\Program Files\Java\jdk-19.0.1\bin\javaw.exe  (Jan 16, 20
Program for calculating equation 1/x = 1/y + 1/z to find value of x
Please input y:10
Please input z:7
Result x = 4.1176467
```

✓ Lab02.6

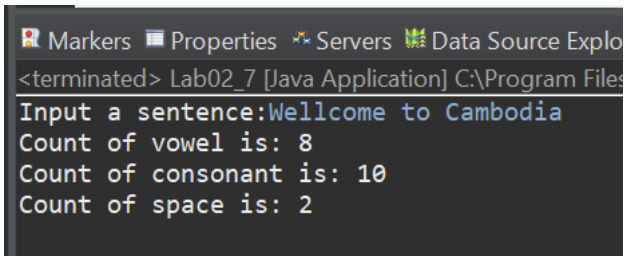
```
import java.util.Scanner;
public class Lab2_6 {
        public static void main(String[] args) {
                Scanner sc=new Scanner(System.in);
                        do {
                        System.out.print("Input a number to check whether it is a prime number:");
                        int num=sc.nextInt();
                        int k=0;
                        int dv=0;
                        for(int i=2;i<num;i++) {
                                if((num/i!=1||num/i!=num)&&num%i!=0) {
                                        k++;
                                }else {
                                        dv=i;
                                        break;
                                }
                        }
                        if(k==num-2) {
                                System.out.println(num+" is a prime number.");
                        }else {
                                System.out.println(num+" is not a prime number, because it is divisible by "+dv);
                        }
                }while(true);
        }

}
```

```
Markers  Properties  Servers  Data Source Explorer  Snippets  Terminal
Lab2_6 [Java Application] C:\Program Files\Java\jdk-19.0.1\bin\javaw.exe  (Jan 16, 202
Input a number to check whether it is a prime number:17
17 is a prime number.
Input a number to check whether it is a prime number:27
27 is not a prime number, because it is divisible by 3
```

✓ Lab02.7

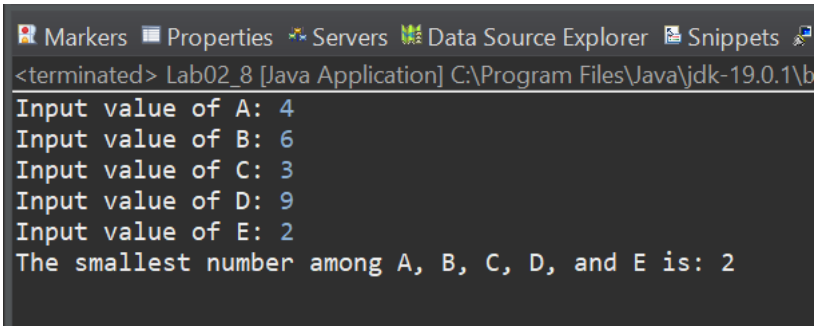
```
import java.util.Scanner;
public class Lab02_7 {
        public static void main(String[] args) {
                Scanner sc=new Scanner(System.in);
                System.out.print("Input a sentence:");
                String str=sc.nextLine();
                int countVowel=0;
                int countconsonant=0;
                int countspace=0;
                str=str.toLowerCase();
                for(int i=0;i<str.length();i++) {
```

```
		if(str.charAt(i)=='i'||str.charAt(i)=='e'||str.charAt(i)=='u'||str.charAt(i)=='o'||str.charAt(i)=='a') {
				countVowel+=1;
			}else if(str.charAt(i)==' ') {
				countspace+=1;
			}else {
				countconsonant+=1;
			}
		}
			System.out.println("Count of vowel is: "+countVowel);
			System.out.println("Count of consonant is: "+countconsonant);
			System.out.println("Count of space is: "+countspace);
	}
}
```



✓ Lab02.8

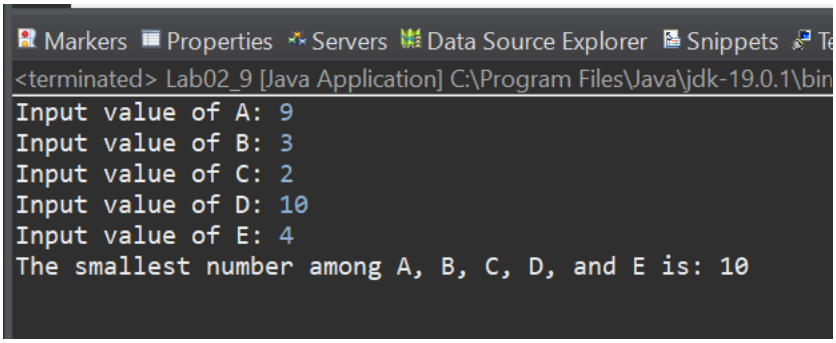
```
import java.util.Scanner;
public class Lab02_8 {
	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		int[] arr=new int[5];
		char[] ch= {'A','B','C','D','E'};
		for(int i=0;i<5;i++) {
			System.out.print("Input value of "+ch[i]+": ");
			arr[i]=sc.nextInt();
		}
		int k=arr[0];
		for(int i=1;i<5;i++) {
			if(k>arr[i]) {
				k=arr[i];
			}
		}
		System.out.println("The smallest number among A, B, C, D, and E is: "+k);
	}
}
```



✓ Lab02.9

```
import java.util.Scanner;
public class Lab02_9 {
	public static void main(String[] args) {
		Scanner sc=new Scanner(System.in);
		int[] arr=new int[5];
		char[] ch= {'A','B','C','D','E'};
		for(int i=0;i<5;i++) {
```

```
                System.out.print("Input value of "+ch[i]+": ");
                arr[i]=sc.nextInt();
            }
            int k=arr[0];
            for(int i=1;i<5;i++) {
                if(k<arr[i]) {
                    k=arr[i];
                }
            }
            System.out.println("The smallest number among A, B, C, D, and E is: "+k);
        }

}
```

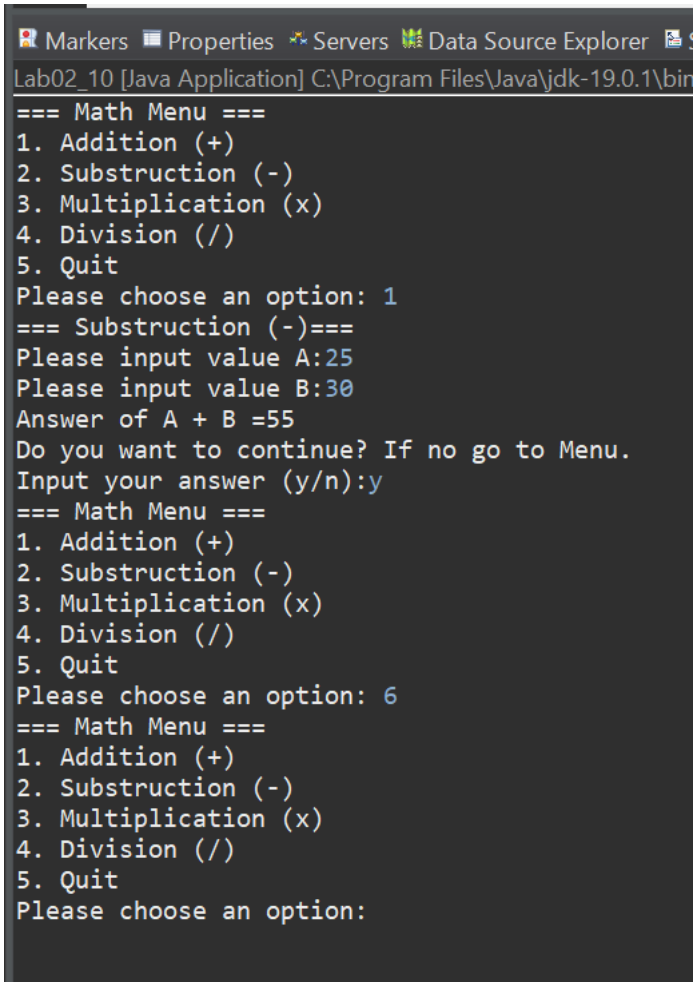


✓ Lab02.10

```
import java.util.Scanner;
public class Lab02_10 {
    static void Starter() {
        Scanner sc=new Scanner(System.in);
        System.out.println("=== Math Menu ===");
        System.out.println("1. Addition (+)");
        System.out.println("2. Substruction (-)");
        System.out.println("3. Multiplication (x)");
        System.out.println("4. Division (/)");
        System.out.println("5. Quit");
        int index;
        System.out.print("Please choose an option: ");
        index=sc.nextInt();
        switch(index) {
        case 1:Add();break;
        case 2:Sub();break;
        case 3:Multi();break;
        case 4:Divide();break;
        case 5:System.out.println("Exited");break;
        default:Starter();
        }
    }
    static void Add() {
        int a,b,c;
        char ch;
        Scanner sc=new Scanner(System.in);
        System.out.println("=== Substruction (-)===");
        System.out.print("Please input value A:");
        a=sc.nextInt();
        System.out.print("Please input value B:");
        b=sc.nextInt();
        c=a+b;
        System.out.println("Answer of A + B ="+c);
        System.out.println("Do you want to continue? If no go to Menu.");
        System.out.print("Input your answer (y/n):");
        ch=sc.next().charAt(0);
```

```
		if(ch=='y'||ch=='Y') {
			Add();
		}else if(ch=='y'||ch=='Y') {
			System.out.println("Exited");
		}else {
			Starter();
		}
	}
	static void Sub() {
		int a,b,c;
		char ch;
		Scanner sc=new Scanner(System.in);
		System.out.println("=== Substruction (-)===");
		System.out.print("Please input value A:");
		a=sc.nextInt();
		System.out.print("Please input value B:");
		b=sc.nextInt();
		c=a-b;
		System.out.println("Answer of A - B ="+c);
		System.out.println("Do you want to continue? If no go to Menu.");
		System.out.print("Input your answer (y/n):");
		ch=sc.next().charAt(0);
		if(ch=='y'||ch=='Y') {
			Sub();
		}else if(ch=='y'||ch=='Y') {
			System.out.println("Exited");
		}else {
			Starter();
		}
	}
	static void Multi() {
		int a,b,c;
		char ch;
		Scanner sc=new Scanner(System.in);
		System.out.println("=== Multiplication (x)===");
		System.out.print("Please input value A:");
		a=sc.nextInt();
		System.out.print("Please input value B:");
		b=sc.nextInt();
		c=a*b;
		System.out.println("Answer of A x B ="+c);
		System.out.println("Do you want to continue? If no go to Menu.");
		System.out.print("Input your answer (y/n):");
		ch=sc.next().charAt(0);
		if(ch=='y'||ch=='Y') {
			Multi();
		}else if(ch=='y'||ch=='Y') {
			System.out.println("Exited");
		}else {
			Starter();
		}
	}
	static void Divide() {
		float a,b,c;
		char ch;
		Scanner sc=new Scanner(System.in);
		System.out.println("=== Division (/)===");
		System.out.print("Please input value A:");
		a=sc.nextInt();
		System.out.print("Please input value B:");
		b=sc.nextInt();
		c=a/b;
```

```
                System.out.println("Answer of A / B ="+c);
                System.out.println("Do you want to continue? If no go to Menu.");
                System.out.print("Input your answer (y/n):");
                ch=sc.next().charAt(0);
                if(ch=='y'||ch=='Y') {
                        Divide();
                }else if(ch=='y'||ch=='Y') {
                        System.out.println("Exited");
                }else {
                        Starter();
                }
        }
        public static void main(String[] args) {
                Starter();
        }

}
```



✓ Lab02.11

```
class IDCard{
        String name;
        int age;
        String gender;
        String Location;
        String Height;
        String Job;

}
class FacebookPost{
        String title;
        String who_Can_See;
```

```
	String tag;
	String []mention=new String[10];
	String photo;
}
class Phone{
	String name;
	String model;
	String price;
	String warrent;
	String color;
}
class Book{
	String title;
	String page;
	String price;
	String recomment_for;
	String type;
}
public class Lab02_11 {
	public static void main(String[] args) {
	//For ID Card
		IDCard card1=new IDCard();
		IDCard card2=new IDCard();
		IDCard card3=new IDCard();

		card1.name="Tet Davann";
		card1.age=25;
		card1.gender="Male";
		card1.Height="170cm";
		card1.Job="Student";
		card1.Location="Phnom Penh";

		card2.name="Super Man";
		card2.age=35;
		card2.gender="Female";
		card2.Height="190cm";
		card2.Job="Flighter";
		card2.Location="Kandal";

		card3.name="Jonh Sina";
		card3.age=25;
		card3.gender="Female";
		card3.Height="185cm";
		card3.Job="Sports";
		card3.Location="Takeov";

		IDCard[] card=new IDCard[3];
		card[0]=card1;
		card[1]=card2;
		card[2]=card3;
		//Finish

	//For Facebook Post
		FacebookPost post1=new FacebookPost();
		FacebookPost post2=new FacebookPost();
		FacebookPost post3=new FacebookPost();

		post1.title="What is color of light of sun?";
		post1.tag="DAVANN";
		post1.mention[0]="Davann";
		post1.mention[1]="Biden";
		post1.mention[2]="Trump";
```

```
        post1.who_Can_See="Friends";
        post1.photo="photo1.png";

        post2.title="Why sea water is salty?";
        post2.tag="DAVANN";
        post2.mention[0]="Putin";
        post2.mention[1]="Kimjongoun";
        post2.mention[2]="Xijinping";
        post2.who_Can_See="Friend of Friend";
        post2.photo="photo2.png";

        post3.title="How to sucess?";
        post3.tag="DAVANN";
        post3.mention[0]="Bill Gate";
        post3.mention[1]="Lilon Mass";
        post3.mention[2]="Zackburg";
        post3.who_Can_See="Friends";
        post3.photo="photo3.png";

        FacebookPost[] post=new FacebookPost[3];
        post[0]=post1;
        post[1]=post2;
        post[2]=post3;
        //Finish

//For Phone
        Phone phone1=new Phone();
        Phone phone2=new Phone();
        Phone phone3=new Phone();

        phone1.name="Samsung";
        phone1.model="J6+";
        phone1.price="399.99$";
        phone1.warrent="2year";
        phone1.color="black";

        phone2.name="Iphone";
        phone2.model="14 pro max";
        phone2.price="1799.99$";
        phone2.warrent="3 month";
        phone2.color="gold";

        phone3.name="Samsung";
        phone3.model="Galaxy Tab";
        phone3.price="799.99$";
        phone3.warrent="1year";
        phone3.color="grey";

        Phone[] phone=new Phone[3];
        phone[0]=phone1;
        phone[1]=phone2;
        phone[2]=phone3;
        //finish

//For Book
        Book book1=new Book();
        Book book2=new Book();
        Book book3=new Book();

        book1.title="The Great";
        book1.page="250 page";
        book1.price="5$";
```

```
                book1.recomment_for="Student";
                book1.type="Education";

                book2.title="Tom and Jerry";
                book2.page="350 page";
                book2.price="25$";
                book2.recomment_for="Children";
                book2.type="toy";

                book3.title="Joav Jit";
                book3.page="120 page";
                book3.price="2.5$";
                book3.recomment_for="Student";
                book3.type="Novel";

                Book[] book=new Book[3];
                book[0]=book1;
                book[1]=book2;
                book[2]=book3;
                //finish


        }

}
```