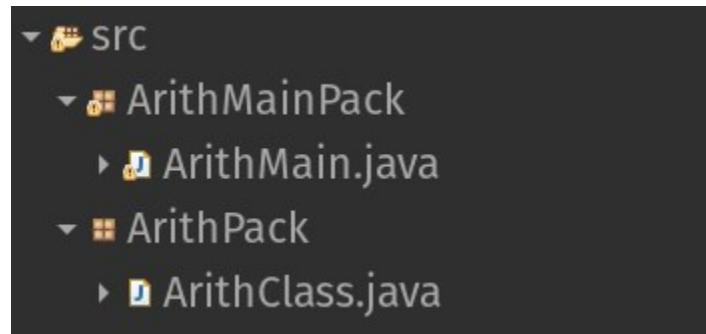


**Lab 9: Develop a Java program for performing arithmetic operations of two numbers x and y got through key board. There are two packages as shown below.**



The below programs show how a class from different package can be accessed.

```
package ArithMainPack;
```

```
//ArithMain.java which is in the package ArithMainPack
```

```
import java.util.Scanner;
```

```
//creating object for ArithClass which is in the package called ArithPack
```

```
import ArithPack.ArithClass;
```

```
public class ArithMain {  
    public static void main(String[] args){  
  
        Scanner sc = new Scanner(System.in);  
  
        // creating object for ArithClass which is in the package called ArithPack  
        ArithClass a = new ArithClass();
```

```
while(true)  
{  
  
    System.out.println("Arithmetic operations");  
    System.out.println("Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit ");  
    int choice = sc.nextInt();  
    System.out.println("Please enter two nos to do arithmetic operations");  
    int x=sc.nextInt();  
    int y=sc.nextInt();  
  
    if (choice==6)  
    {  
        System.out.println("\n exiting");  
        break;  
    }  
}
```

```

switch(choice)
{
    case 1 :
        System.out.println("\n Sum is "+a.Add(x,y));
        break;
    case 2 :
        System.out.println("\n Difference is "+a.Sub(x,y));
        break;
    case 3 :
        System.out.println("\n Multiplication is "+a.Mul(x,y));
        break;
    case 4 :
        System.out.println("\n Division is "+a.Div(x,y));
        break;
    case 5 :
        System.out.println("\n Mod Division is "+a.ModDiv(x,y));
        break;
}
}
}

```

// accessing ArithClass module from ArithPack

package ArithPack;

public class ArithClass {

```

    public int Add(int a, int b)
    {
        return a+b;
    }

```

```

    public int Sub(int a,int b)
    {
        return a-b;
    }

```

```

    public int Mul(int a,int b)
    {
        return a*b;
    }

```

```

    public int Div(int a,int b)
    {
        return a/b;
    }

```

```

public int ModDiv(int a,int b)
{
    return a%b;
}

}

```

o/p

Arithmetic operations

Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit

1

Please enter two nos to do arithmetic operations

4 5

Sum is 9

Arithmetic operations

Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit

2

Please enter two nos to do arithmetic operations

5 6

Difference is -1

Arithmetic operations

Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit

3

Please enter two nos to do arithmetic operations

5 6

Multiplication is 30

Arithmetic operations

Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit

4

Please enter two nos to do arithmetic operations

5 6

Division is 0

Arithmetic operations

Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit

5

Please enter two nos to do arithmetic operations

16 5

Mod Division is 1

Arithmetic operations

Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit

6

Please enter two nos to do arithmetic operations

5 6

exiting

Lab Ex 9: Develop a Java program for performing relational operations of two numbers x and y got through key board using modules RelateMain.java from Relateclass package as shown below

o/p

Relational operations

- 1.CheckGreater
2. CheckSmaller
3. CheckEqual
4. Exit

Please enter the operation which you prefer

3

Please enter two nos to relate

4 5

false

Please enter the operation which you prefer

Relational operations

- 1.CheckGreater
2. CheckSmaller
3. CheckEqual
4. Exit

1

Please enter two nos to relate

4 3

true

Please enter the operation which you prefer

Relational operations

- 1.CheckGreater
2. CheckSmaller
3. CheckEqual
4. Exit

3

Please enter two nos to relate

5 5

true

Please enter the operation which you prefer

Relational operations

1. CheckGreater
2. CheckSmaller
3. CheckEqual
4. Exit

4

bye ! Thanks for using me!