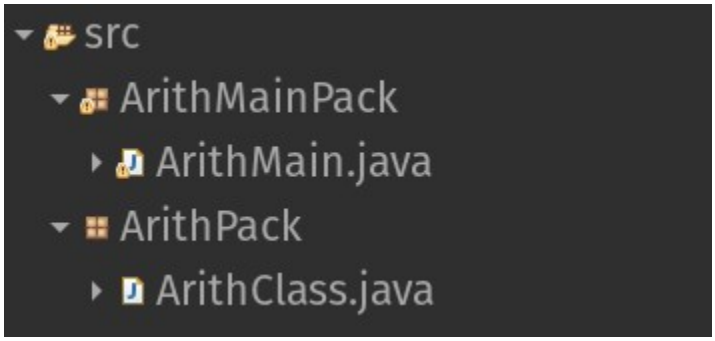
Lab 8 : Develop a Java program for performing arithmetic operations of two numbers x and y got through key board. There are two packages as shown below.



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("Arithmatic 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 arithmatic operaions");
                          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

```
Arithmatic operations
Please enter 1-Add,2-Sub,3-Mul,4-Div 5-Moddiv 6-exit
1
Please enter two nos to do arithmatic operaions
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 arithmatic operaions
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 arithmatic operaions
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 arithmatic operaions
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 arithmatic operaions
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 arithmatic operaions
5 6

exiting
```

Lab Ex 8: 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!