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CLASS: S2 **ROLL NO:** 2201094

EXPERIMENT NO: 5

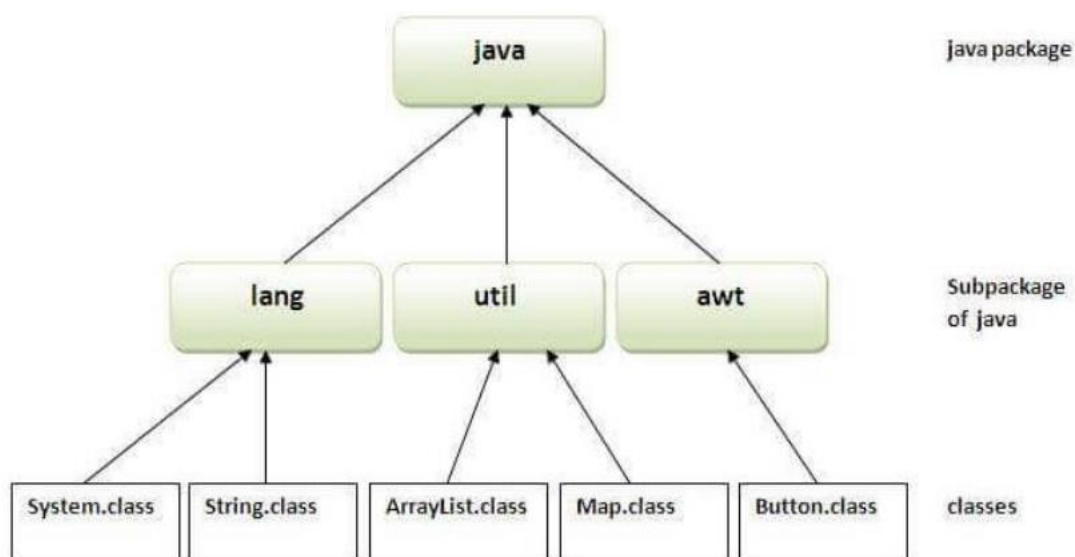
AIM: Programs on packages.

THEORY:

A java package is a group of similar types of classes, interfaces and sub-packages. Package in java can be categorized in two form, built-in package and user-defined package. There are many built-in packages such as java, lang, awt, javax, swing, net, io, util, sql etc.

Advantage of Java Package:

- Java package is used to categorize the classes and interfaces so that they can be easily maintained.
- Java package provides access protection.
- Java package removes naming collision.



There are three ways to access the package from outside the package.

1. `import package.*;`
2. `import package.classname;`
3. fully qualified name

CODE:

```
import calculator.*;

class main
{
    public static void main(String args[])
    {
        System.out.println("Name : Shaikh Salif \t Roll No. : 94");

        Add obj1=new Add();

        System.out.println("Two numbers are 15 , 30");

        System.out.println("Addition is : " + obj1.add(15,30));

        Subtract minus=new Subtract();

        System.out.println("Subtraction is : " + minus.subtract(30,15));

        Divide div=new Divide();

        System.out.println("Division is : " + div.divide(30,15));

        Multiply mult = new Multiply();

        System.out.println("Multiplication is : " + mult.multiply(15,30));
    }
}

//new file

package calculator;
```

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

//new file

```
package calculator;  
  
public class Divide  
{  
    public int divide(int a,int b)  
    {  
        return (a/b);  
    }  
}
```

//new file

```
package calculator;  
  
public class Multiply  
{  
    public int multiply(int a,int b)  
    {  
        return (a*b);  
    }  
}
```

//new file

```
package calculator;  
  
public class Subtract  
{  
  
    public int subtract(int a,int b)  
  
    {  
  
        return (a-b);  
  
    }  
  
}
```

OUTPUT:

```
C:\Users\shaik\JAVA\calculator>java main  
Name : Shaikh Salif      Roll No. : 94  
Two numbers are 15 , 30  
Addition is : 45  
Subtraction is : 15  
Division is : 2  
Multiplication is : 450
```

CONCLUSION: In conclusion, packages in Java play a crucial role in organizing and managing classes and interfaces within a project.