Chapter 12 Practice Set Questions by Munawar

Questions

1. Create three classes calculator, scientific calculator and Hybrid calculator and group them into a package.

Solution

```java
package calc;

class Calculator{
    public void calculator(int a,int b){
        System.out.println("Your result is : "+a+b);
    }
}

class ScCalculator{
    public void calculator(int a,int b){
        System.out.println("Your result is : "+a+b);
        System.out.println("Your result is : "+Math.cos(a+b));
    }

}

class HyCalculator{
    public void calculator(int a,int b){

        System.out.println("Your result is : "+Math.sin(a+b));
    }
}

public class Problem1{
    public static void main (String [] args) {
        System.out.println("I am main method ");
    }

}
```

2. Use a built in package in java to write a class which displays a message (by using send) after taking input from the user.

Self-Question

3. Create a package in class with three package levels, folders, folder1, and folder2.

Solution

```java
import javax.swing.plaf.synth.SynthTextAreaUI;
import java.util.Scanner;
import java.util.Random;
package folder.folder1,folder2;
public class Main {
    public static void main (String [] args) {


    }

}
```

4. Prove that you cannot access default property but can access protected properly from the subclass.

Solution

```java
import javax.swing.plaf.synth.SynthTextAreaUI;
import java.util.Scanner;
import java.util.Random;
// Question 3
class check{
    protected int p=100;
    String defaults="Munawar";
    public int a=12;
}
class C2 extends check{
}
public class Main {
    public static void main (String [] args) {
    }

}
```

Protected can be accessible but default cannot be accessible.

Source code:

```java
package calc;

class Calculator{
    public void calculator(int a,int b){
        System.out.println("Your result is : "+a+b);
    }
}

class ScCalculator{
    public void calculator(int a,int b){
        System.out.println("Your result is : "+a+b);
        System.out.println("Your result is : "+Math.cos(a+b));
    }

}

class HyCalculator{
    public void calculator(int a,int b){

        System.out.println("Your result is : "+Math.sin(a+b));
    }
}

public class Problem1{
    public static void main (String [] args) {
        System.out.println("I am main method ");
    }

}
```

Thank You