Creating meaningful names

It is important to name a variable meaningfully. A computer can understand any code, but we have to write code for human understanding too. Here are some bad and good practices to be followed while naming a variable, a function and a class.

Bad Practice:

```
class SumSquare{
    fun add():Int{
        var s:Int =0
        for(number in 1 ≤ .. ≤ 100)
    {
            s += (number*number)
        }
        return s
}

fun square():Int{
        var pro :Int = (1 ≤ .. ≤ 100).sum() * (1 ≤ .. ≤ 100).sum()
        return pro
}

fun main()

val obj = SumSquare()
    println(obj.square() - obj.add())
}
```

- Having a single character as a variable name will not be understood by the co-developers.
- People can easily misunderstand the purpose of the function if we named it meaninglessly.

Good Practice:

```
class SumSquareDifference {
    fun sumOfSquare():Int{
        var sum:Int =0
        for(number in 1 ≤ .. ≤ 100)
    {
            sum += (number*number)
        }
        return sum
    }
    fun squareOfSum():Int{
        var product :Int = (1 ≤ .. ≤ 100).sum() * (1 ≤ .. ≤ 100).sum()
        return product
    }
}

fun main()
{
    val sumSquareDifference = SumSquareDifference()
    println(sumSquareDifference.squareOfSum() - sumSquareDifference.sumOfSquare())
}
```

Variable Name:

• A variable name must tell the purpose of the variable.

Bad Practice:

```
var <u>s</u>:Int =0
```

Good Practice:

```
var <u>sum</u>:Int =0
```

Bad Practice:

```
var pro :Int = (1 ≤ .. ≤ 100).sum() * (1 ≤ .. ≤ 100).sum()
```

Good Practice:

```
var product :Int = (1 ≤ .. ≤ 100).sum() * (1 ≤ .. ≤ 100).sum()
```

Function Name:

• A function name must tell what action is performed by that function.

Bad Practice:

```
fun add():Int{
    var <u>s</u>:Int =0
    for(number in 1 ≤ .. ≤ 100)
    {
        <u>s</u> += (number*number)
    }
    return <u>s</u>
}
```

Good Practice:

```
fun sumOfSquare():Int{
    var sum:Int =0
    for(number in 1 ≤ .. ≤ 100)
    {
        sum += (number*number)
    }
    return sum
}
```

Bad Practice:

```
fun square():Int{
    var pro :Int = (1 ≤ .. ≤ 100).sum() * (1 ≤ .. ≤ 100).sum()
    return pro
}
```

Good Practice:

```
fun squareOfSum():Int{
    var product :Int = (1 ≤ .. ≤ 100).sum() * (1 ≤ .. ≤ 100).sum()
    return product
}
```

Class Name:

• A class name must tell about the purpose of the class.

Bad Practice:

class SumSquare{

Good Practice:

class SumSquareDifference {