HW: Independent Study

**Types**

**1- Evaluate (Java):**

* 5.0/2 = 2.5
* 10 % 3 = 1
* 3 / 3 + 5 \* 3 = 16
* 2/3 = 0
* true || false = true
* “Comp” +” Sci” =CompSci
* “10” +”-1” =10-1
* “Belcalis Marlenis Almanzar”. charAt (2) =l

String elem = “hydrogen”;    
elem. length (); = 8

2. The price would be 3.99 incase of strawberry and pistachio price is 0.0

4. These snippets is little different

-1st one in 2nd step used else if but the 2nd one use only if

But the output is same “This is a good show”

**Loops**

**5- Create a for loop that prints the *cubes (x3)* of all integers from -10 to 10**

**A screenshot of a social media post

Description automatically generated**

**6.The output of snippet:**

0.1

0.2

0.3

0.4

0.5

**Functions**

**7- Consider this function**

-return type is string

-parameter type is string

- Looks like if input has vowel it moves on to the next iteration else it stores a constant in output

12.

* What is an interface?
  + An interface is a reference type in Java like class. And also, it is a collection of abstract method.
* What is an abstract class?
  + An abstract class is a superclass in java.
* Why would you use one or the other?
  + A Java abstract class can have instance methods that helps to implements a default behavior. Java interface are public by default.

**Math Foundations**

**14- Evaluate or Approximate**

25/3 = little more than 8

10^-1 = .1

2^5 = 32

3^4 = 81

5^2 = 25

82^ (.5) = little more than 9

6! = 720

log (100) = 2

log (1000) =3

log (log (10000000000)) = 1