**PASS Week 2**

**Boolean Operators and Keywords:**

Write the word for the signs and the signs for the words

A Boolean refers to a value that is either \_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_.

!= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

== \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Greater than or equal to: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Less than: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Greater than: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

<= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Keywords: \_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Operator Precedence:** List operators from order of highest precedence to lowest.

Brackets, OR, AND, Inequality, NOT, Arithmetic Operators



**Decision Branches:** Keywords:



**if, elif and else Statements**

Find the errors in the following code

(Hint: There are 7 errors and spacing is not an error)

print("What type of mortgage would you like? Open or closed?")

Mortgage\_Type = input("Open or closed: ")

if Mortgage\_Type = "Open" or Mortgage\_Type = "open":

print("What term duration would you like? 1 year or 3 years?")

Term\_Duration = input(str())

if Term\_Duration == 1 year or Term\_Duration == "1 yr":

print("Your mortgage rate would be 7.10%")

elif Term\_Duration == "3 years" and Term\_Duration == "3 yr":

print("Your mortgage rate would be 7.50%")

elif Term\_Duration == "5 years" or Term\_Duration == "5 yr":

print("This term duration is not available for an open mortgage plan.")

elif:

print("This is not a valid term duration.")

**Flowcharts**

Let’s make a flowchart, with decision blocks for what school level children between the ages of 5 & 18 are in. For example, a child that is 8 is in elementary school. After making the flow chart, code this program into VS code. Ask the user to input the age of the child and use if, elif and else statements to output the school level of the child.

5-10 - Elementary School

11 - 14 - Middle School

15 - 18 - High School

**Challenge**

If you complete the flowchart and code it in VS code, try printing out the year the child was born in as well given the age the user input is their current age, meaning that is their age in 2021. For example an 8 year-old would be born in 2013