#### Question 1 (1 point)

Identify all the datatypes used in your weekly portfolio logbook question

## Question 2 (1 point)

Write a program using a switch statement and an enumeration to accept 3 inputs from the user. The first two will be numbers and the last will be an operation either of these four operands (+,-,/, or \*) and return the corresponding arithmetic.

### Question 3 (1 point)

- a.) Modify the program in Question 2 such that you have an Arithmetic super-class and four operand subclasses (Addition, Subtraction, Multiplication and Division) having an overloaded calculate() method.
- b.) Draw the class diagram for the above software problem. Insert the share link from draw.io or lucid charts.

#### Question 4 (1 point)

Write the psudocode and flowchart to convert any decimal value to hexadecimal.

Tip: Rewatch the screencast and you can use sample content as a guide.

# **Question 5** (6 points)

Match the following symbols with their names

#### Question 5 options:

Dependency	1	$\overline{}$
Aggregation	2	
Realisation		
Composition	3	•
Inheritance	4	>
Association	5	

6 ----<del>-</del>

# Question 6 (1 point)

When creating classes, for any particular abstraction. What is the rule of thumb for private and public members. How can you tell which members by default you will make private and which you can make public.