**Module b.3**

**Level 1: Input & Logic**

1. Read through “Lesson 12: Input – What Is Input?” and “Lesson 12: Input – Example” and “Lesson 12: Input – Shortcut”.
2. Type the following code into the white area of the IDE and run the program. Explain what you see in the black area of the IDE.

print("Type your name:")

name = input()

print("Hi", name, "how are you?")

Type your name:

zak

Hi zak how are you?

When I typed the following in the white area of the IDE and then I pressed run it said to type my name. when I pressed enter it then said hi zak how are you.

1. Complete “Lesson 9: Logic – Many Choices” by typing the sample commands in the white area of the IDE.
   1. Combine the lesson code with the code from question #2 above to create a logic choice based on input read from the console.
   2. If the typed name equals your name then print out “Hello Me!”
   3. Else if the typed name equals your friend’s name then print out “Hello Friend.”
   4. Else print out “Who are you?”
   5. Provide your complete program below.

print("Type your name:")

myname = "Zak"

myname = input()

if myname == "Zak":

print("Hello me!")

elif myname =="Frank":

print("Hello Friend.")

else:

print("Who are you?")

**Level 2: Loops**

1. Complete “Lesson 10: Loops – What Are Loops” and “Lesson 10: Loops – Counting Loops” by typing the sample commands in the white area of the IDE.
   1. Modify the loop to start at 0 and repeat 5 times..
   2. Provide your modified code and resulting output below.

for mynum in [1, 2, 3, 4, 5]:

print("Hello", mynum)

1. Create a list of the names of at least 5 of your friends and use a counting loop to print out their names as follows:.
   1. Create a list of the names of at least 5 of your friends.
   2. Identify the highest list index (i.e. Index of the last name.)
   3. Create a counting loop to loop over the list indexes
   4. Use the loop index number to print “Hello “ + name for each of your friends.
   5. Provide your modified code and resulting output below.

For friendnum in (“nabeel”, “kudhirit”, “Dylan”, “soi”, “karman”):

Print (“hello”, friendnum)

The index of the last name is soi and it is number 4

“soi”

1. Complete “Lesson 10: Loops – Conditional Loops” by typing the sample commands in the white area of the IDE.
   1. Modify the loop to stop when the count becomes greater than 5.
   2. Provide your modified code and resulting output below.

mycount = 0

while (mycount < 8):

print('The count is:', mycount)

mycount = mycount + 1

1. Create a list of the names of at least 5 of your friends and use a conditional loop to print out their names as follows:.
   1. Use your list of friends from question #2 above
   2. Create a conditional loop to loop over the list indexes
   3. Use the loop index number to print “Hello “ + name for each of your friends.
   4. Provide your modified code and resulting output below.

friendnum = (“nabeel”, “kudhirit”, “Dylan”, “soi”, “karman”):

Print (“hello”, friendnum)

* An index number is assigned to each name so this way one can access it
* A variable needs to be set in place because then we can count how many objects from the list have been outputted
* This variable will be called (namecount)
* Namecount = -1
* (Namecount <4):
* namecount = namecount +1
* as namecount increases the variable changes at the same time. This allows it to go to the next name on the list
* print (“Hello”, friendnum[namecount])

**Level 3: Functions**

1. Complete “Lesson 11: Functions – Functions” by typing the sample commands in the black area of the IDE.
   1. Create a list of instructions for tying your shoes..
   2. Provide your shoe tying function below.
2. First you get shoe laces
3. Then you fold the laces into a bunny like ear shape
4. Then after, you cross the two bunny ears
5. Next you would make one bunny ear go under the other one
6. Finally you pull the laces to tighten the knot

Tying shoe laces (lace, bunny ear, cross, one bunny under the other, tighten knot)

**Level 4: Programming Challenge**

1. Create a running Python program based on specifications provided t.b.d.