**Tuesday 12th October**

**Unit 1**

num = 0

while num <= 5:

num = int (input ("Enter a number: "))

print ("The last number you entered was a", num)

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counter = 1

while counter <4:

print ("Happy days")

counter = counter + 1

print ("End of program")

**What is printed?**

Happy days

Happy days

Happy days

End of program

Code will keep on running as a while loop until counter reaches 4.

**Variable table**

Counter 1

Counter 2

Counter 3

Counter 4 == happy days == end of program

**Task 2 While Loops 15/10/2021**

again = "y"

count = 0

while again == "y":

name = input ("enter a name of someone you want to invite: ")

print (name, "has been invited")

count = count+1

again = input ("Do you want to invite someone else? (y/n) ")

print ("You have ", count, "people coming to your party")

**Task 3 Random number guesser 1-100**

# guesser program

import random

number = random.randint(1,100)

guess = int (input ("Have a guess between 1 - 100?"))

while guess! = number:

if guess > number:

print ("Your guess is greater than the number")

else:

print ("your guess is lower than the number")

print("Wrong!")

guess = int (input ("Guess again...: "))

print("Correct")

**Task 4 while loop**

# compnum guesser

compnum = 50

guess = int (input ("Enter a number "))

counter = 1

while guess! = compnum:

if guess > compnum:

print ("Your guess is greater than the number")

else:

print ("your guess is lower than the number")

counter = counter+1

guess = int (input ("Guess again: "))

print("Correct")

print ("It took you ", counter, " attempts")

**PLENARY**

**What is the difference between a while loop and a for loop?**

The difference between for loop and while loop is that in a for loop the number of iterations to be done is already known and is used to obtain a certain result. Whereas in the while loop the command runs until a certain condition is reached and the statement is proven false.

**What is a For loop?**

A For loop is a loop which runs a set amount of time.

**What is iteration ?**

A code which repeats over and over

**Is iteration an example of a while loop or for loop?**

While loop

**Which loop do we define the number of times to be repeated?**

For loop

**Which loop is repeated until a certain condition is met?**

While loop