while Loop Examples

#Repeat while loop as long as condition is True.

while True:

    print("Good Job!")

#Repeat while loop as long as condition num < 5 is True.

```
num = 0
while num < 5:
    print("Good Job!")
```

#Repeat while loop as long as condition num < 5 is True.

```
num = 0
while num < 5:
    print("Good Job!")
    num = num + 1
```

#Repeat while loop as long as condition counter < 3 is True.

```
counter = 0
while counter < 3:
    print("Inside loop")
    counter = counter + 1
else:
        print("Inside else")
```

#Find the SUM of the numbers from 1 to 10. Repeat while loop as long as condition inc < num is True.

```
num = 10
sum = 0
inc = 1
while inc <= num:
    sum = sum + inc
    inc = inc + 1
print("The sum is ", sum)
```

sum = sum + inc
Variable sum to hold the numbers that are being counted

inc = inc + 1
Variable inc to increment from 1 to 2 to 3 to 4 up to 10.

print("The sum is ", sum)
Will print the final sum outside of the while loop

#Find the SUM of the numbers from 1 to 100000.

theSum = 0

count = 1

while count <= 100000:

    theSum = theSum + 1

theSum = theSum + 1
Variable theSum to hold the numbers that are being counted

    count = count + 1

count = count + 1
Variable count to increment from 1 to 2 to 3 to 4 up to 100000.

print("The sum is ", theSum)

print("The sum is ", theSum)
Will print the final sum outside of the while loop

```
#Find the SUM of numbers entered from a user, or just press enter to stop.


theSum = 0.0
data = input("Enter a number or just press enter to quit: ")
while data != "":                          #empty string ""
        number = float(data)
        theSum = theSum + number
        data = input("Enter a number or just press enter to quit: ")


#The next statement is outside the loop
print("The sum is ", theSum)
```

```
theSum = 0.0
while True:
        data = input("Enter a number or just press enter to quit: ")
        if data == "":                              #empty string ""
                break
        number = float(data)
        theSum = theSum + number


#The next statement is outside the loop
print("The sum is ", theSum)


#The break Statement will cause an exit from the while loop.
```

```python
#Loop will repeat asking for a grade to be inputted between 0 - 100.
while True:
    number = int(input("Enter a numeric grade from 0 – 100 "))
    if number >= 0 and number <=100:
        break
    else:
        print("Error: grade must be between 0 – 100 ")


print("The grade is ", number)
```

if number >= 0 and number <= 100

is True, **break** will exit out

of the while loop

#Loop will repeat as long as var > 0 is True. But, if var == 5, break statement will stop the loop.

```
var = 10

while var > 0:
        print("Current Value: ", var)
        var = var – 1
        if var == 5:
                break

print("Good bye!")
```

#if condition var == 5 is True, **break** will exit out of the while loop

#Loop will repeat as long as var > 0 is True. But, if var == 5, continue statement will return back to beginning of loop.

```
var = 11
while var > 0:
        var = var – 1
        if var == 5:
                continue
        print("Current Value: ", var)

print("Good bye!")
```

#if condition var == 5 is True, continue will return back to the beginning of the loop.