
While Loop Handout (Answers)

Using a **while** loop, write a short code snippet to complete each task.

A. Count the number of vowels in a given string.

```
vowels = "aeiouAEIOU"
count = 0
index = 0
phrase = input("Enter a prhase.")
while(index < len(phrase)):
    if(phrase[index] in vowels):
        count = count + 1
    index = index + 1
print(count)
```

B. Output only the vowels included in a given string.

```
vowels = "aeiouAEIOU"
index = 0
phrase_vowels = ""
phrase = input("Enter a prhase.")
while(index < len(phrase)):
    if(phrase[index] in vowels):
        phrase_vowels = phrase_vowels + phrase[index]
    index = index + 1
print(phrase_vowels)
```

C. Add up all the numbers from 1 to 10.

```
sums = 0
num = 1
while(num <= 10):
    sums = sums + num
    num = num + 1
print(sums)
```

D. Count down from 100 by 7.

```
n = 100
while(n >= 0):
    print(n)
    n = n - 7
```

E. Loop until the user enters 'q' for quit.

```
phrase = input("Enter a prhase or 'q'.")
while (phrase != 'q'):
    phrase = input("Enter a prhase or 'q'.")
```

F. Output the times table from 1 to 12 (in a grid).

TODO - See for loops.