Python While loop

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The while Loop

With the while loop we can execute a set of statements as long as a condition is true.

Example

Print i as long as i is less than 6:

```
i = 1
while i < 6:
  print(i)
  i += 1
```

The break Statement

With the break statement we can stop the loop even if the while condition is true:

Example

Exit the loop when i is 3:

```
i = 1
while i < 6:
  print(i)
  if i == 3:
    break
  i += 1
```

The continue Statement

With the continue statement we can stop the current iteration, and continue with the next:

Example

Continue to the next iteration if i is 3:

```
i = 0
while i < 6:
  i += 1
  if i == 3:
    continue
  print(i)
```

The else Statement

With the else statement we can run a block of code once when the condition no longer is true:

Example

Print a message once the condition is false:

```
i = 1
while i < 6:
```

```
    print(i)
    i += 1
else:
  print("i is no longer less than 6")
```

Coding Questions:

1. Write a program to print first n multiples of 3 and 2 both
2. Write a program to print all even numbers between 2 numbers
3. Write a program to print all the characters of string 'Python' using while loop
4. Write a program to print odd numbers from a list =[23,45,32,25,46,33,71,90]
5. Write a program to find the sum of digits of a number
6. Write a program to check whether a number is an armstrong number or not. e.g 153
7. Write a program to add first n terms of the following series 1^1 + 2^2 + 3^3 + ... n
8. Write a program to print following series till n terms 2,22,222,2222,22222....
9. Write a program to find sum of the following series till n numbers 1+4-9+16-25.... n terms