

```
1  # Functions
2  def generate_number_list(upper_limit):
3      index = 0
4      output_list = [] # Tom Liste
5      while (index < upper_limit):
6          output_list.append(index)
7          index += 1
8      return output_list
9
10
11 print(generate_number_list(5))
12 print(generate_number_list(10))
13
14
15 # Named Argument vs Positional Argument
16 def generate_number_list(start_index, upper_limit):
17     index = start_index
18     output_list = [] # Empty List
19     while (index < upper_limit):
20         output_list.append(index)
21         index += 1
22     return output_list
23
24
25 print("Positional Arguments = ", generate_number_list
      (1, 11))
26 print("Named Arguments = ", generate_number_list(
      upper_limit=10, start_index=2))
27
28
29 # Default Arguments
30 def generate_number_list(start_index, upper_limit,
      increment=1):
31     index = start_index
32     output_list = [] # Empty List
33     while (index < upper_limit):
34         output_list.append(index)
35         index = index + increment
36     return output_list
37
38
39 print("Default Value for Increment = ",
      generate_number_list(0, 11))
40 print("Non-Default Value for Increment = ",
```

```
40 generate_number_list(0, 11, 2))
41
42 # Celsius to Fahrenheit
43 def fah_cel(Fahrenheit):
44     Fahrenheit = float(Fahrenheit)
45     celsius = (Fahrenheit - 32) * (5/9)
46     return celsius
47
48 print(fah_cel(212)) # 212 F = 100 C
49 print(fah_cel(32)) # 32 F = 0 C
50
51
52 # Fahrenheit to Celsius
53 def cel_fah(Celsius):
54     Celsius = float(Celsius)
55     Fahrenheit = (Celsius * (9/5)) + 32
56     return Fahrenheit
57
58 print(cel_fah(100))
59 print(cel_fah(0))
60
61
62
```