Sum of digits

intital code

```
def digital_root(n):
    number = n
    sum = 0
    while number >= 10:
     number_list = [int(i) for i in str(number)]
     for i in number_list:
        sum += i
    number = sum
    return number
```

corrected code

```
def digital_root(n):
    number = n
    while number >= 10:  # Continue until the sum becomes a sing
        number_list = [int(i) for i in str(number)]
        sum = 0
        for i in number_list:
            sum += i
        number = sum  # Update number with the sum of digits
    return number  # Return the digital root
```

sum = 0 should be moved under while block, this is so the sum resets for every loop

a while should have been used rather than if, as its repeating until it becomes a single digit

```
def digital_root(n):
    if n == 0:
        return 0
    elif n % 9 == 0:
        return 9
    else:
        return n % 9
```

just a clever way too