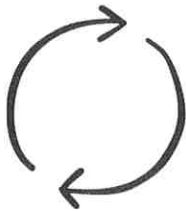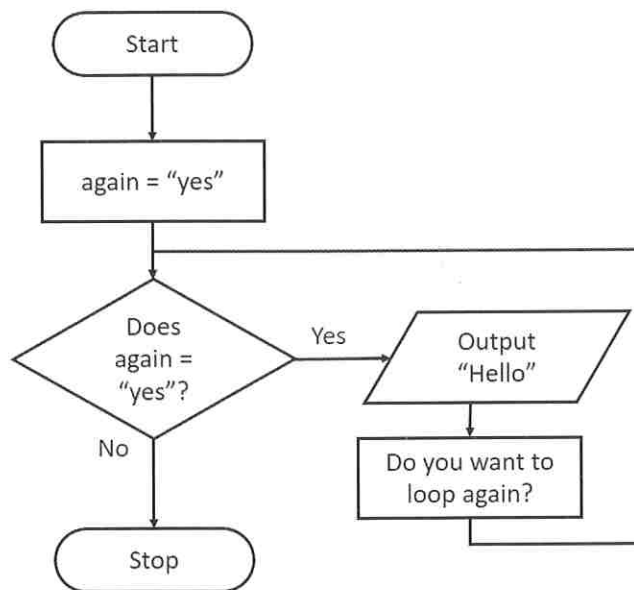# While Loop

Explanation

A **while loop** allows code to be repeated an unknown number of times as long as a condition is being met. This may be 100 times, just the once or even never. In a while loop the condition is checked before the code is run, which means it could skip the loop altogether if the condition is not being met to start with. It is important, therefore, to make sure the correct conditions are in place to run the loop before it starts.

In Python the example for the flow chart above would look as follows:

```python
again = "yes"
while again == "yes":
    print ("Hello")
    again=input("Do you want to loop again? ")
```

It will keep repeating this code until the user enters anything other than "yes".

Example Code

```
total = 0
while total < 100:
 num = int(input("Enter a number: "))
 total = total + num
print("The total is", total)
```

The above program will create a variable called total and store the value as 0. It will ask the user to enter a number and will add it to the total. It will keep repeating this as long as the total is still below 100. When the total equals 100 or more, it will stop running the loop and display the total.

Comparison Operators

Operator	Description
==	Equal to
!=	Not equal to
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to

Logical Operators

Operator	Description
and	Both conditions must be met
or	Either condition must be met

Remember: text values must appear in speech marks and numeric values do not.