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Assignment week 9

Question-1: A for loop is used when the number of iterations is known, whereas execution is done in the while loop until the statement in the program is proved wrong

Question-2: While true is a statement that will execute a target statement for ever as long as the given condition is true. So essentially an execution that will repeat forever until the statement is false

Question-3: Flowcharts can be uses as a representation of an algorithm and it's helpful for writing and explaining programs to others

Question-4:

1. Iteration variable: The variable which stores a portion of the iterable when the for loop is being executed. Iteration variable changes each time through a loop.
2. Finite loop: Finite loops of the repeat class execute their body a fixed number of times. Unlike infinite loops there is no detection of instantaneously terminating bodies of repeat instructions.
3. Infinite loop: Infinite loop or while loop is used to execute a block of statements repeatedly until a given condition is satisfied. Infinite loops keep going until a logical condition becomes false.
4. Iteration or pass: Pass or iterations are the repetitive action of loops. Iteration is an object that can traverse through all the values.

Question -5:

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep 5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> age = int(input("Enter age : "))
Enter age : 18
>>> if age >= 18:
...     print("Eligible for voting")
... else:
...     print("Not eligible for voting")
...
...
Eligible for voting
>>> Enter age:9
SyntaxError: invalid syntax
>>> age = int(input("Enter age : "))
Enter age : 9
>>> if age >= 18:
...     print ("Eligible for voting")
... else:
...     print("Not eligible for voting")
...
...
Not eligible for voting
>>> |
```

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