What is python modules ?

- A module is python file which contains code that we uses or reuses in multiple ph python programs
- It contains functions, lists, classes also.
- There are 2 types of python modules :-
  i) Built - in Modules
  ii) User - Defined Modules

1). Built in Modules
- One of the many superpowers of python is that it comes with "rich standerd library."
- The rich standerd library contains lot of built - in - modules
- So it provide lot of reusable code.
- Some built - in modules are "os", "sys", "datetime", "ramdom".
- We can use built - in modules whenever you like in the program.

2) User - defined modules.
- We can create own functions, & classes & put inside modules.
- We can include hundred lines of code into any program just by writing a simple import statement.

> Comments in python

- There are 3 types of comments in python.
  - i) Single line
  - ii) Multi line
  - iii) Docstring comment

- The syntax of comments depending upon the type.

  i) Single line comment :
   - This type of comment should begin with '#' character
   - Anything should be written after # considered as single line comment.
   - Syntax :
     # comments here
   - There are 2 ways to written single line comment
     i) before the code
     ii) After the code.

- PEP8, Python style Guide, recommends using less than 79 characters in a single-line comment to make it easier to read. If comment is exceeding the recommended length, you can use the next type : multi-line comments.

ii) Multi-line comment

- Python does not support multi-line comment.
- So there are multiple ways to write multi-line comments.
- First way is by using # at the beginning of each line of the comment.
- Next way is by using string literals but not assigning to any variables. If we not assign string literals to a variable, python interpreter ignores it. We can use a single (") quotation or double (" ") quotation.
- We can also use multi-line strings for commenting; For this, we use either a " or " " quotation marks three times.

> Advantages of comments in python
  i) Makes code easily understandtable by other programmers.
  ii) Code becomes self-explanatory
  iii) Helps remember why we use a specific command, method or function in the code
  iv) It enables the interpreter to ignore some part of the code while testing.