

1. Is it permissible to use several import statements to import the same module? What would the goal be? Can you think of a situation where it would be beneficial?

Ans: Yes, it is permissible to use several import statements to import the same module. It is beneficial when we have to import multiple functions from the same module.

2. What are some of a module's characteristics? (Name at least one.)

Ans:

- `__name__` : It returns the name of the module
- `__doc__` : It denotes the documentation string line written in a module code.
- `__file__` : It holds the name and path of the module file from which it is loaded
- `__dict__` : It return a dictionary object of module attributes, functions and other definitions and their respective values

3. Circular importing, such as when two modules import each other, can lead to dependencies and bugs that aren't visible. How can you go about creating a program that avoids mutual importing?

Ans: Use `if __name__ == '__main__':`

In the function, you can't directly refer to the function in the program.

4. Why is `__all__` in Python?

Ans: It provides list of all modules present in a library.

5. In what situation is it useful to refer to the `__name__` attribute or the string `'__main__'`?

Ans: During the time of execution of the code if we want to refer to the module in which we are working on then we use the name attribute. Suppose if that module is being imported from some other module then, the current module in which we are working is referred to as the string `__main__`.

6. What are some of the benefits of attaching a program counter to the RPN interpreter application, which interprets an RPN script line by line?

Ans: RPN eliminates the need for parentheses and reduces keystrokes so users can complete calculations more quickly and efficiently.

7. What are the minimum expressions or statements (or both) that you'd need to render a basic programming language like RPN primitive but complete— that is, capable of carrying out any computerised task theoretically possible?

Ans: operator and operands (3)

Example: 3+4