Functions:

A function is a block of code which only runs when it is called. You can pass data, known as parameters, into a function. A function can return data as a result.

Arguments in functions:

Arguments are specified after the function name, inside the parentheses. You can add as many arguments as you want, just separate them with a comma.

Why Functions?

- **Reusability**: A function can be used over and over again. You do not have to write redundant code.
- **Simplicity**: Functions are easy to use and make the code readable.

Types of Functions:

- Built-in functions: A function that is predefined in the python library and can be used directly.
- User-defined functions: The functions that are defined by the user and can be called in the python environment where it has been defined.

Function Scope:

The scope of a function means the extent to which the variables and other data items made inside the function are accessible in code. In python, the scope is the function's body.

Built-in String Functions:

One of the built in functions for the strings is find keyword. It helps in finding a sub-string in the string.

Replace is also used to replace a substring in the main string.

Other keywords as well are tried out in the python script provided.

If-Else / If-elif-else Conditional Operators:

If else conditions are used to compare variables and data and depending on the same executing line of command that is related to the conditional operators.

Lists: Lists are used to store multiple items in a single variable.

Tuples: Tuples are used to store multiple items in a single variable. A tuple is a collection which is ordered and unchangeable.

OUTPUTS:

```
shtlp_0034@SHTLP0034:~/Documents/python$ /bin/python3 /home/shtlp_0034/Doc
Enter a number:6
multiple of 6
shtlp_0034@SHTLP0034:~/Documents/python$ []
```

IF/Else Conditions

```
40.001687999999994
enter a number: 64
True
shtlp_0034@SHTLP0034:~/Documents/python$
```

In-built functions

```
shtlp_0034@SHTLP0034:~/Documents/python$ /bin/python3 /home/shtlp_0034/Doc
enter a number: 23
new number 2300
shtlp_0034@SHTLP0034:~/Documents/python$
```

User-defined functions

```
shtlp_0034@SHTLP0034:~/Documents/python$ /bin/python3 /home/shtlp_0034/Doc
17
-1
Good to home! Help yourself with some chunkies.
W.e.l.c.o.m.e. .t.o. .h.o.m.e.!. .H.e.l.p. .y.o.u.r.s.e.l.f. .w.i.t.h. .s.
hello how are you yunu
shtlp_0034@SHTLP0034:~/Documents/python$ []
```

Strings