Python input()

1. What is the input() function in Python used for?

input() function in python is used to get the input entry from user

2. How can you accept an integer as input from the user using input()?

In [8]:
```
user_input_int = int(input("Enter user input :"))
```

In [10]:
```
print(user_input_int)
```

```
6
```

3. How do you accept a float input from the user?

In [17]:
```
user_input_float = float(input("Enter user input in float format:"))
```

In [19]:
```
user_input_float
```

Out[19]:
```
4.5
```

4. How can you take multiple space-separated values as input?

In [42]:
```
multi_space_seperated =  input("Pass as multi-line text")
```

In [32]:
```
multi_space_seperated
```

Out[32]:
```
'This is explain of multiline text \\n eg: for new line'
```

In [46]:
```
help()
```

```
Welcome to Python 3.12's help utility! If this is your first time using
Python, you should definitely check out the tutorial at
https://docs.python.org/3.12/tutorial/.

Enter the name of any module, keyword, or topic to get help on writing
Python programs and using Python modules.  To get a list of available
modules, keywords, symbols, or topics, enter "modules", "keywords",
"symbols", or "topics".

Each module also comes with a one-line summary of what it does; to list
the modules whose name or summary contain a given string such as "spam",
enter "modules spam".

To quit this help utility and return to the interpreter,
enter "q" or "quit".

You are now leaving help and returning to the Python interpreter.
If you want to ask for help on a particular object directly from the
interpreter, you can type "help(object)".  Executing "help('string')"
has the same effect as typing a particular string at the help> prompt.
```

5. How do you check if a number entered by the user is positive, negative, or zero?

In [74]:
```
user_input_number = int(input("Enter the user input to validate if positive or negative or Zero :"))
print(("Entered number is positive number : " + str(user_input_number)) * int((user_input_number > 0)))
print(("Entered number is negative number : " + str(user_input_number)) * int((user_input_number < 0)))
print(("Entered number is equals to Zero") * int((user_input_number == 0)))
```

```
Entered number is equals to Zero
```

6. How do you convert user input to a list of integers?

In [92]:
```
user_input_integers = input("Enter numbers with comma seperated")
list1 = list()
for i in user_input_integers.split(','):
    list1.append(i)

print(list1)
```

```
['1', '4', '8', '2', '7', '9']
```

In [94]:
```
list1
```

Out[94]:
```
['1', '4', '8', '2', '7', '9']
```

In [96]:
```
type(list1)
```

Out[96]:
```
list
```

7. How do you accept a string input and print it in uppercase?

In [105…
```
input_string = input("Enter string input")
print(input_string.upper())
```

```
I AM A HARD WORKING HUMAN BEING
```

8. Write a Python program that accepts a string and prints the number of vowels in it.

In [240…
```
listofvowels = ['a', 'e', 'i', 'o', 'u']
user_input_string = input('Enter a text : ')
#user_input_string = "the usa"

#Method 1:
count_ofvowels = int(user_input_string.count('a'))
count_ofvowels += int(user_input_string.count('e'))
count_ofvowels += int(user_input_string.count('i'))
count_ofvowels += int(user_input_string.count('o'))
count_ofvowels += int(user_input_string.count('u'))

# Method 2:
#count_ofvowels = 0
#for i in listofvowels:
#    count_ofvowels += int(user_input_string.count(i))

print('Number of vowels :' + str(count_ofvowels))
```

```
Number of vowels :8
```

In [ ]:

9. Write a program that takes a number as input and checks if it is even or odd.

In [231…
```
validate_input_event_odd = int(input("Enter the value in number to validate even / odd : "))
isEvenOdd = ((validate_input_event_odd % 2) == 0)
#print(isEvenOdd)
print(("It\'s a even number :" + str(validate_input_event_odd)) * int(isEvenOdd == True))
print(("It\'s a odd number :" + str(validate_input_event_odd)) * int(isEvenOdd == False))
```

```
It's a even number :8
```

10. How would you check if a string is a palindrome using input()?

In [273…
```
input_string = input('Enter your text : ')
#input_string = "MEEN"
input_string[::-1] == input_string
print("Entered text is a palandrome" * int((input_string[::-1] == input_string) == True))
print("Entered text is a not a palandrome" * int((input_string[::-1] == input_string) == False))
```

```
Entered text is a palandrome
```

11. Write a program that takes a number as input and prints its square.

In [278…
```
input_number = int(input("Enter a number : "))
print("Square of the entered number is : " + str(input_number ** 2))
```

```
Square of the entered number is : 36
```

12. Write a program that asks for a number and prints whether it is divisible by 3.

In [293…
```
input_number = int(input("Enter a number : "))
print("It is divisible by 3 " * int((input_number % 3 == 0) == True))
print("It is not divisible by 3 " * int((input_number % 3 == 0) == False))
```

```
It is divisible by 3
```

13. How would you check if a number is divisible by both 3 and 7?

In [305…
```
# If the entered number reminder is 0 when divided by 3 and 7 then it is said to be divisible by both 3 and 7.
input_number = int(input("Enter a number : "))
print("It is divisible by 3 and 7 " * int(((input_number % 3 == 0) and (input_number % 7 == 0))== True))
print("It is not divisible by 3 and 7 " * int(((input_number % 3 == 0) and (input_number % 7 == 0)) == False))
```

```
It is divisible by 3 and 7
```

14. How do you accept a list of comma-separated values as input?

In [329…
```
# add input numbers with commas
list1 = input("Enter list of values")
print(list1)
```

```
1,2,3,4,5,6
```

15. Write a Python program that takes two numbers as input and prints their product.

In [341…
```
input1 , input2 = int(input("Enter input 1:")), int(input("Enter input 2:"))
print("Product is : " + str(input1 * input2))
```

```
Product is : 20
```

16. Write a program that checks if the input number is a prime number.

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: