

# Python input() -- 50 Questions

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

Ans: It is used to read input from user as string

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

```
In [1]: num=int(input('Enter your favourite number:'))  
print('given number is :',num,' The square of',num,' is:',num*num)
```

given number is : 5 The square of 5 is: 25

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

```
In [2]: num1=float(input('Enter float number:'))  
print(num1)
```

2.22

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

```
In [5]: values=input('enter space seperated values:').split()  
values
```

Out[5]: ['hello', 'okula', 'how', 'are', 'you']

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

```
In [12]: num=int(input('please enter the number'))  
if(num>0):  
    print(num, 'is Positive number')  
elif(num<0):  
    print(num, 'is Negative number')  
else:  
    print('given number is zero')
```

-88 is Negative number

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

```
In [14]: numbers=[int(x) for x in input('Enter space seperated values:').split()]
          numbers
```

```
Out[14]: [1, 2, 3, 4, 5, 6, 7, 8]
```

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

```
In [17]: str=input('enter a string:')
          print('given string in UPPER CASE letters is:',str.upper())
```

```
given string in UPPER CASE letters is: HELLO
```

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

```
In [18]: user_input=input('enter a string')
          vowels='aeiouAEIOU'
          count=0
          for char in user_input:
              if char in vowels:
                  count +=1
          print('number of vovles in given string is:',count)
```

```
number of vovles in given string is: 2
```

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

```
In [20]: num=int(input('enter a number:'))
          if(num%2==0):
              print('Given number',num,'is even number')
          else:
              print('Given number',num,'is odd number')
```

```
Given number 45 is odd number
```

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

```
In [21]: str=input('enter a string')
          if(str==str[::-1]):
              print('Given String"',str,'" is palindrome')
```

```
else:  
    print('Given String"',str,'" is not a palindrome')
```

Given String" abcdcba " is palindrome

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

```
In [22]: num=int(input('enter a number'))  
         print('The square of',num,'is:',(num**2))
```

The square of 4 is: 16

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

```
In [24]: num=int(input('enter a number'))  
         if(num%3==0):  
             print(num,'is divisible by 3')  
         else:  
             print(num,'is not divisible by 3')
```

7 is not divisible by 3

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

```
In [27]: num=int(input('enter a number'))  
         if(num%3==0 and num%7==0):  
             print(num,'is divisible by both 3 and 7')  
         else:  
             print(num,'is not divisible by both 3 and 7')
```

21 is divisible by both 3 and 7

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

```
In [28]: values=input('enter comma seperated values:').split()  
         values
```

Out[28]: ['hello', 'how', 'are', 'you']

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

```
In [31]: num1=int(input('enter first number:'))  
         num2=int(input('enter second number:'))
```

```
print('product of given number is:',(num1*num2))
```

product of given number is: 15

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

```
In [38]: num=int(input('Enter a number'))
count=0
if(num>1):
    for i in range(2,num):
        if(num%i==0):
            count=1
            break
if(count==1):
    print('Given number is not a prime number')
elif(count==0):
    print('Given number is a prime number')
```

Given number is not a prime number

## 17. How can you accept a boolean value (True/False) from the user?

```
In [40]: bool_str=input('enter True or False:')
bool_val=bool_str.strip().lower()=='true'
print('User given input is',bool_val)
```

User given input is True

## 18. Write a program that accepts a string and prints the reverse of that string.

```
In [42]: str=input('enter a string:')
print('Reverse of given string is:',str[::-1])
```

Reverse of given string is: olleh

## 19. Write a program that asks for a user's name and age and prints a message.

```
In [43]: name=input('enter user name:')
age=int(input('enter age:'))
print('Username is:',name,' and age is:',age)
```

Username is: nirvan and age is: 4

## 20. Write a program to calculate the factorial of a number using input().

```
In [44]: num=int(input('enter a number'))
factorial=1
for i in range(1,num+1):
    factorial *=i
print('Factorial of',num,'is:',factorial)
```

Factorial of 6 is: 720

## 21. How do you prevent a user from entering an empty string?

```
In [47]: input_str=input('enter something').strip()
while not input_str:
    print('input can not be empty')
    input_str=input('enter something').strip()
print('you entered',input_str)
```

input can not be empty  
input can not be empty  
you entered h

## 22. Write a program to check if the entered number is a perfect square.

```
In [56]: import math
num=int(input('enter a number'))
if math.isqrt(num)**2==num:
    print(num,'is a perfect square')
else:
    print(num, 'is not a perfect square')
```

81 is a perfect square

## 23. Write a program that asks for a year and determines if it's a leap year.

```
In [61]: year=int(input('Enter a year'))
if (year % 4==0 and year % 100!=0) or (year % 400 ==0):
    print('Year',year,'is a Leap Year')
else:
    print('Year',year,'is not a Leap Year')
```

Year 2100 is not a Leap Year

## 24. How can you remove leading and trailing spaces from a string input?

```
In [62]: str=input('Enter something:').strip()  
print(str)
```

hello

## 25. How do you handle incorrect inputs when you expect an integer using input()?

```
In [67]: try:  
    num=int(input('Enter a number'))  
except ValueError:  
    print('Invalid input! Please enter a valid integer')
```

Invalid input! Please enter a valid integer

## 26. Write a program that accepts a string and counts the occurrence of a particular character.

```
In [71]: str=input('Enter string')  
char=input('Enter a character')  
print('Occurance of',char,'in',str,'is:',str.count(char))
```

Occurance of l in hello okula is: 3

## 27. How would you convert user input to lowercase using input()?

```
In [75]: str=input('Enter a string').lower()  
print('Given in String in lowercase:',str)
```

Given in String in lowercase: hello okula

## 28. Write a program that accepts a number and prints whether it is a multiple of 10.

```
In [77]: num=int(input('Enter a number'))  
if(num%10==0):  
    print('Given number',num,'is multiple of 10')  
else:  
    print('Given number',num,'is not a multiple of 10')
```

Given number 121 is not a multiple of 10

## 29. How would you check if a string entered by the user contains only alphabets using input()?

```
In [83]: str=input('Enter a String')
if str.isalpha():
    print('Given String has only alphabets')
else:
    print('Given String contains non-alphabets too')
```

Given String contains non-alphabets too

## 30. Write a program to count the number of words in a sentence entered by the user.

```
In [85]: str=input('Enter a sentence')
print('Number of words in given sentence are:',len(str.split()))
```

Number of words in given sentence are: 5

## 31. How would you accept a date input from the user in Python?

```
In [86]: from datetime import datetime
date_str=input('Enter a Date(YYYY-MM-DD):')
date=datetime.strptime(date_str,"%Y-%m-%d")
print('Entered Date:',date)
```

Entered Date: 1990-11-13 00:00:00

## 32. Write a program that checks if the entered number is divisible by both 3 and 5.

```
In [88]: num=int(input('Enter a Number'))
if(num%3==0 and num%5==0):
    print('Given Number is divisible by both 3 and 5')
else:
    print('Given Number is not divisible by both 3 and 5')
```

Given Number is divisible by both 3 and 5

## 33. Write a program to swap the values of two variables using input().

```
In [89]: val1=int(input('Enter value 1'))
val2=int(input('Enter value 2'))
print('Values Before swaping',val1,'and',val2)
```

```
val1, val2=val2, val1  
print('Values Afrer swaping',val1,'and',val2)
```

Values Before swaping 3 and 6

Values Afrer swaping 6 and 3

### 34. Write a program to take user input and print it without spaces between words.

```
In [90]: str=input('Enter a string')  
print('Given string with out space is:',str.replace(' ',''))
```

Given string with out space is: hellookulahowareyou

### 35. How do you validate if an entered input is a valid email address?

In [ ]:

### 36. Write a program that accepts a number and prints its cube.

```
In [92]: num=int(input('Enter a Number:'))  
print('Cube of',num,'is:',num**3)
```

Cube of 5 is: 125

### 37. How would you accept and store multiple names from the user?

```
In [93]: names=input('Enter names seperated by comma:').split()  
print('names are:',names)
```

names are: ['okula', 'vakula', 'vasanth', 'ranaveer', 'nirvan']

### 38. How would you extract numbers from a string entered by the user?

In [ ]:

### 39. How do you find the maximum number from a list of integers entered by the user?

```
In [94]: nums=list(map(int,input('Enter numbers seperated by space:').split()))  
print('Maximum Number is:',max(nums))
```



Maximum Number is: 96

## 40. How would you prompt the user for input until they enter a valid number?

```
In [97]: while True:
          try:
              num=int(input('Enter a valid Number:'))
              break
          except ValueError:
              input('Invalid Number! Please enter valid number')
```

## 41. Write a program to check if the entered string has digits.

```
In [103... str=input('Enter a string')
count=1
for i in str:
    if(i.isdigit()):
        print('Entered String have digits')
        count +=1
        break
if(count==1):
    print('Entered String does not have digits')
```

Entered String does not have digits

## 42. Write a program to check if the entered string has only whitespace characters.

```
In [105... str=input('Enter a String')
if(str.isspace()):
    print('Entered String has only white space')
else:
    print('Entered String contains non white space')
```

Entered String has only white space

## 43. Write a program to find the sum of all digits in a string entered by the user.

```
In [107... digits=list(map(int,input('Enter digits with comma seperated:').split()))
print('Sum of digits is:',sum(digits))
```

Sum of digits is: 45

## 44. Write a program that accepts a number and prints its absolute value.

```
In [113... num=int(input('Enter a Number'))
print('Absolute value of given number is:',abs(num))
```

Absolute value of given number is: 7

## 45. How would you check if a string entered by the user contains any uppercase letters?

```
In [116... str=input('Enter a String')
if any(char.isupper() for char in str):
    print('Given String has upper case letters')
else:
    print('Given String does not have any upper case letters')
```

Given String has upper case letters

## 46. Write a program that converts Celsius to Fahrenheit.

```
In [117... celsius=float(input('Enter Temperature in Celsius'))
fahrenheit=(celsius * 9/5) + 32
print('Temperature in Fahrenheit:',fahrenheit)
```

Temperature in Fahrenheit: 104.0

## 47. Write a program to find the average of a list of numbers entered by the user.

```
In [118... values=list(map(int, input('Enter numbers:').split()))
print('Average of given values is:', sum(values)/len(values))
```

Average of given values is: 5.0

## 48. Write a program to count the number of consonants in a string entered by the user.

```
In [119... str=input('Enter a String:')
consonants='bcdfghjklmnpqrstvwxyz'
count=0
for char in str.lower():
    if(char in consonants):
        count +=1
print('Total number of consonants in given String are:',count)
```

Total number of consonants in given String are: 3

## 49. How do you check if a string entered by the user contains any punctuation?

```
In [122... import string
str=input('Enter a String:')
count=0
for char in str:
    if(char in string.punctuation):
        print('Given String has punctuation')
        count +=1
if(count==0):
    print('Given String has no punctuation')
```

Given String has punctuation

## 50. Write a program that accepts a sentence and prints the longest word.

```
In [126... words=input('Enter a secntence').split()
longest_word=max(words,key=len)
print('Longest word in given sentence is:',longest_word)
```

Longest word in given sentence is: vakula

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: