

Pyhton 50 questions on Input()

In [2]: *# 2. How can you accept an integer as input from the user using `input()`?*
`a1=int(input("Enter the number:"))`

In [8]: *# 3. How do you accept a float input from the user?*
`a2=float(input("Enter the float:"))`

In [54]: *# 4. How can you take multiple space-separated values as input?*
`a3=input("enter the number").split()`
`a3`

Out[54]: ['2', '3', '4', '45']

In [34]: *# 5. How do you check if a number entered by the user is positive, negative, or*
`a1=int(input("Enter the number:"))`
`if a1>0:`
 `print(a1,"is a positive number")`
`elif a1<0:`
 `print(a1,"is a negative number")`
`else:`
 `print(a1,"is zero")`

0 is zero

In [62]: *# 6. How do you convert user input to a list of integers?*
`a1=input("Enter the number:")`
`a1=[a1]`
`print(a1)`

['2 3 4 45']

In [64]: *# 6.*
`a1=[input("Enter the number:")] # Both approaches gives same output`
`print(a1)`

['2 3 4 45']

In [74]: *# 7. How do you accept a string input and print it in uppercase?*
`a1=input("Enter a string:")`
`print(a1.upper())`

RAVI

In [76]: *# 7.*
`a1=input("Enter a string:")`
`a1=a1.upper()`
`print(a1)`

RAVITEJA

In [132...]: *# 8. Write a Python program that accepts a string and prints the number of vowel*
`a1=input("Enter a string:")`
`vowels="aeiou"`
`count=sum(1 for char in a1 if char.lower() in vowels)`
`print("Number of vowels:",count)`

```
a2=".".join(char for char in a1 if char.lower() in vowels)
print("detected vowels are:", a2)
```

Number of vowels: 4

detected vowels are: a,i,e,a

```
In [140... # 9. Write a program that takes a number as input and checks if it is even or odd
a1=int(input("Enter the number:"))
if a1%2==0:
    print(a1,"is even number")
else:
    print(a1,"is a odd number")
```

4 is even number

```
In [148... # 10. How would you check if a string is a palindrome using `input()`?
a1=input("enter the number:")
a2=a1[::-1]
if a2 == a1:
    print("It's a palindrome number")
else:
    print("Not a palindrome")
```

It's a palindrome number

```
In [156... # 10.
a1=input("enter the number:") # we can also write like this.
if a1==a1[::-1]:
    print("It's a palindrome number")
else:
    print("Not a palindrome")
```

Not a palindrome

```
In [162... # 11. Write a program that takes a number as input and prints its square?
a1=int(input("Enter the number:"))
a1 = a1**2
print(a1)
```

25

```
In [164... # 11.
a1=int(input("Enter the number:"))
print("square number is", a1**2)
```

square number is 4

```
In [172... # 12. Write a program that asks for a number and prints whether it is divisible
a1=int(input("Enter the number:"))
if a1%3==0:
    print("Divisible by 3")
else:
    print("Not divisible by 3")
```

Divisible by 3

```
In [176... # 13. How would you check if a number is divisible by both 3 and 7?
a1=int(input("Enter the number:"))
if a1%3==0 and a1%7==0:
    print("Divisible by 3 and 7")
else:
    print("Not divisible by 3 and 7")
```

Divisble by 3 and 7

```
In [180... # 13.
a1=int(input("Enter the number:"))
if a1%3==0 & a1%7==0:
    print("Divisble by 3 and 7")
else:
    print("Not divisible by 3 and 7")
```

Divisble by 3 and 7

```
In [192... # 14. How do you accept a list of comma-separated values as input?
a1=input("Enter the values:").split(',')
print (a1)
```

['1 2 3']

```
In [194... # 15. Write a Python program that takes two numbers as input and prints their pr
a1=int(input("Enter the 1st number: "))
a2=int(input("Enter the 2nd number: "))
product=a1*a2
print("product of two numbers is: ",product)
```

product of two numbers is: 4

```
In [196... # 15.
a1=int(input("Enter the 1st number: ")) # memory saving by simplifying the code
a2=int(input("Enter the 2nd number: "))
print("product of two numbers is: ",a1*a2)
```

product of two numbers is: 4

```
In [214... # 16. Write a program that checks if the input number is a prime number?
a1=int(input("Enter the number: "))
if a1>1:
    for i in range(2, a1):
        if a1%i==0:
            print("Not a prime number")
            break;
    else:
        print("It's a prime number")
else:
    print("Not a prime number")
```

Not a prime number

```
In [216... # 17. How can you accept a boolean value (True/False) from the user?
a1=input("enter True or False: ").lower()=="true"
```

```
In [222... # 18. Write a program that accepts a string and prints the reverse of that strin
a1=input("enter a string: ")
print("reverse of a string is: ", a1[::-1])
```

reverse of a string is: ajet ivar

```
In [230... # 19. Write a program that asks for a user's name and age and prints a message?
a1=input("Enter your name: ")
a2=input("Enter your age: ")
print(f"My name is {a1}. Iam {a2} years old.")
```

My name is raviteja. Iam 23 years old.

```
In [234... # 20. Write a program to calculate the factorial of a number using `input()`?
a1=int(input("Enter the number: "))
fact=1
for i in range(1, a1+1):
    fact*=i
print(fact)
```

24

```
In [244... # 21. How do you prevent a user from entering an empty string?
a1=input("Enter something: ").strip()
if not a1:
    print("input cannot be empty")
else:
    print(f"you entered: {a1}")
```

input cannot be empty

```
In [242... # 21. How do you prevent a user from entering an empty string?
a1=input("Enter something: ").strip()
if not a1:
    print("input cannot be empty")
else:
    print(f"you entered: {a1}")
```

you entered: 22

```
In [250... # 22. Write a program to check if an entered number is a perfect square?
import math
a1=int(input("Enter the number: "))
if math.sqrt(a1)**2==a1:
    print("perfect square")
else:
    print("Not a perfect square")
```

perfect square

```
In [252... # 22. Write a program to check if an entered number is a perfect square?
import math
a1=int(input("Enter the number: "))
if math.sqrt(a1)**2==a1:
    print("perfect square")
else:
    print("Not a perfect square")
```

Not a perfect square

```
In [254... # 23. Write a program that asks the user for a year and determines if it's a Le
a1=int(input("Enter a number: "))
if(a1%4 == 0 and a1%100 != 0) or (a1%400 == 0):
    print(a1,"is a Leap year")
else:
    print(a1,"Not a Leap year")
```

2024 is a Leap year

```
In [262... # 24. How can you remove leading and trailing spaces from a string input?
a1=input("Enter the string: ").strip()
print(a1)
```

ravi teja

In [264]: `# 25. How do you handle incorrect inputs when you expect an integer using `input`
try:
 a1=int(input("Enter a number: "))
except ValueError:
 print("Invalid input")`

Invalid input

In [268]: `# 25. How do you handle incorrect inputs when you expect an integer using `input`
try:
 a1=int(input("Enter a number: "))
except ValueError:
 print("Invalid input")`

In [29]: `# 26. Write a program that accepts a string and counts the occurrence of a parti
a1=input("Enter a string: ")
a2=input("which alphabet you want to count: ")
print(f"char in {a2}: {a1.count(a2)}")`

char in a: 2

In [33]: `# 27. How would you convert user input to lowercase using `input()`?
a1=input("Enter a character: ")
print(a1.lower())`

raviteja

In [41]: `# 28. Write a program that accepts a number and prints whether it is a multiple
a1=int(input("Enter a number: "))
if a1%10==0:
 print(a1,"is a multiple of 10")
else:
 print(a1,"Not a multiple of 10")`

50 is a multiple of 10

In [51]: `# 29. How would you check if a string contains only alphabets using `input()`?
a1=input("Enter a string: ")
if a1.isalpha():
 print(a1,"contains only alphabets")
else:
 print(a1,"not contains alphabets")`

ravi contains only alphabets

In [53]: `# 30. Write a program to count the number of words in a sentence entered by the
a1=input("enter a sentence: ")
print(len(a1.split()))`

3

In [59]: `# 31. How would you accept a date input from the user in Python?
from datetime import datetime
a1=input("Enter the date(YYYY-MM-DD): ")
date=datetime.strptime(a1,"%Y-%m-%d")
print(date)`

2024-03-30 00:00:00

In [67]: `# 32. Write a program that checks if the entered number is divisible by both 3
a1=int(input("Enter a number: "))
if a1 % 3 == 0 and a1 % 5 == 0:`

```
    print(a1,"is divisible by both")
else:
    print(a1,"is not divisible by both")
```

15 is divisible by both

```
In [69]: # 33. Write a program to swap the values of two variables using `input()`?
a=input("Enter a value: ")
b=input("Enter b value: ")
a,b=b,a
print(a,b)
```

20 10

```
In [75]: # 34. Write a program to take user input and print it without spaces between wor
a1=input("Enter a input: ")
print(a1.replace(" ",""))
```

raviteja

```
In [81]: # 35. How do you validate if an entered input is a valid email address?
import re
a1 = input("Enter email: ")
if re.match(r"^[^@]+@[^@]+\.[^@]+", a1):
    print("Valid email")
else:
    print("Invalid email")
```

Valid email

```
In [83]: # 36. Write a program that accepts a number and prints its cube?
a1=int(input("Enter a number: "))
print(a1**3)
```

27

```
In [85]: # 37. How would you accept and store multiple names from the user?
a1=input("Enter names: ")
print(a1.split())
```

['ravi', 'teja']

```
In [1]: # 38. How would you extract numbers from a string entered by the user?
import re
a1=input("Enter a string: ")
num=re.findall(r'\d+',a1) # d = digits
print(num)
```

['19']

```
In [7]: # 39. How do you find the maximum number from a list of integers entered by the
numbers = list(map(int, input("Enter numbers separated by spaces: ").split()))
print("Maximum number:", max(numbers))
```

Maximum number: 34

```
In [9]: # 40. How would you prompt the user for input until they enter a valid number?
while True:
    try:
        a1=int(input("Enter a valid number: "))
        break;
    except ValueError:
        print("Invalid input")
```

Invalid input

```
In [11]: # 41. Write a program to check if the entered string has digits.
a1=input("Entyer the numbers: ")
if any(char.isdigit()for char in a1):
    print("Contains digits")
else:
    print("No digits")
```

Contains digits

```
In [13]: # 42. Write a program to check if the entered string has only whitespace charac
a1=input("Entyer the numbers: ")
if a1.isspace():
    print("Contains whitespaces")
else:
    print("Contains no whitespaces ")
```

Contains no whitespaces

```
In [19]: # 43. Write a program to find the sum of all digits in a string entered by the
a1=input("Enter the numbers: ")
num=sum(int(digit)for digit in a1 if digit.isdigit())
print("sum of digits is: ",num)
```

sum of digits is: 6

```
In [31]: # 44. Write a program that accepts a number and prints its absolute value?
a1=int(input("Enter the numbers: "))
print(abs(a1))
```

12

```
In [37]: # 45. How would you check if a string entered by the user contains any uppercase
a1=input("Enter the string: ")
if any(char.isupper()for char in a1):
    print("Yes it consists",a1)
else:
    print("No it doesn't consists")
```

Yes it consists Ravi

```
In [39]: # 46. Write a program that converts Celsius to Fahrenheit?
celsius=float(input("Enter the celsius: "))
far=(celsius*9/5)+32 # 9/5 Or 1.8 = conversion factor
print(far) # 32= freezing point
```

91.4

```
In [43]: # 47. Write a program to find the average of a List of numbers entered by the us
a1=list(map(int,input("Enter the numbers: ")))
print(sum(a1)/len(a1))
```

2.5

```
In [59]: # 48. Write a program to count the number of consonants in a string entered by t
a1=input("Enter the string: ")
consonants="bcd fghjklmnpqrstvwxyz"
count=sum(1 for char in a1.lower() if char in consonants)
count2=",".join(char for char in a1 if char.lower() in consonants)
print(count)
print(count2)
```

2
r,v

```
In [61]: # 49. How do you check if a string entered by the user contains any punctuation?
import string
text = input("Enter a string: ")
if any(char in string.punctuation for char in text):
    print("Contains punctuation")
else:
    print("No punctuation")
```

Contains punctuation

```
In [65]: # 50. Write a program that accepts a sentence and prints the Longest word?
text = input("Enter a sentence: ")
words = text.split()
longest_word = max(words, key=len)
print("Longest word:", longest_word)
```

Longest word: raviteja

In []:

In []: