Pyhton 50 questions on Input()

In [2]:
```
a1=int(input("Enter the number:")) # 2
```

In [8]:
```
a2=float(input("Enter the float:")) # 3
```

In [54]:
```
a3=input("enter the number").split() # 4
a3
```

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

In [34]:
```
a1=int(input("Enter the number:")) # 5
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]:
```
a1=input("Enter the number:") # 6
a1=[a1]
print(a1)
```

```
['2 3 4 45']
```

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

```
['2 3 4 45']
```

In [74]:
```
a1=input("Enter a string:") # 7
print(a1.upper())
```

```
RAVI
```

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

```
RAVITEJA
```

In [132…
```
a1=input("Enter a string:") # 8
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…
```
a1=int(input("Enter the number:")) # 9
if a1%2==0:
     print(a1,"is even number")
```

```
else:
    print(a1,"is a odd number")
```

```
4 is even number
```

In [148…
```
a1=input("enter the number:") # 10
a2=a1[::-1]
if a2 == a1:
    print("It's a palindrome number")
else:
    print("Not a palindrome")
```

```
It's a palindrome number
```

In [156…
```
a1=input("enter the number:") # 10 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…
```
a1=int(input("Enter the number:")) # 11
a1 = a1**2
print(a1)
```

```
25
```

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

```
square number is 4
```

In [172…
```
a1=int(input("Enter the number:")) # 12
if a1%3==0:
    print("Divisble by 3")
else:
    print("Not divisible by 3")
```

```
Divisble by 3
```

In [176…
```
a1=int(input("Enter the number:")) # 13
if a1%3==0 and a1%7==0:
    print("Divisble by 3 and 7")
else:
    print("Not divisible by 3 and 7")
```

```
Divisble by 3 and 7
```

In [180…
```
a1=int(input("Enter the number:")) # 13
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…
```
a1=input("Enter the values:").split(',') # 14
print (a1)
```

```
['1 2 3']
```

In [194…
```
a1=int(input("Enter the 1st number: ")) # 15
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…
```
a1=int(input("Enter the 1st number: ")) # 15, memory saving by simplifying the c
a2=int(input("Enter the 2nd number: "))
print("product of two numbers is: ",a1*a2)
```

```
product of two numbers is:  4
```

In [214…
```
a1=int(input("Enter the number: ")) # 16
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…
```
a1=input("enter True or False: ").lower()=="true" # 17
```

In [222…
```
a1=input("enter a string: ") # 18
print("reverse of a string is: ", a1[::-1])
```

```
reverse of a string is:  ajet ivar
```

In [230…
```
a1=input("Enter your name: ") # 19
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…
```
a1=int(input("Enter the number: ")) # 20
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…
```python
# 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…
```python
# 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…
```python
# 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…
```python
# 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…
```python
# 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…
```python
# 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]:
```python
# 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]:
```python
# 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 doen'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 0r 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="bcdfghjklmnpqrstvwxyz"
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 [ ]: