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# W.A.P to find input character of vowel or not. 07/11/23

Tue

Soln:- ch = input("Enter the single character")  
print("vowel") if ch == 'a' or ch == 'e' or ch == 'i' or  
ch == 'o' or ch == 'u' else print("not vowel")

O/p → Enter the single character a  
→ vowel.

O/p → Enter the single character p  
→ not vowel.

②

# W.A.P to find input no is +ve, -ve or zero.

Soln:- num = int(input("enter any no"))  
print("+ve") if num > 0 else print("-ve") if num < 0 else  
print("zero")

③

# W.A.P to find input character is alphabet, digit or special character.

Soln:- ch = input("enter any character")  
print("alphabet") if ch >= 'A' and ch <= 'Z' or  
ch >= 'a' and ch <= 'z' else print("digit")  
if ch >= '0' and ch <= '9' else print("special  
character").

# not operator

→ not is only 1 operand,

→ not is a unary operator.



### Truth Table:

	op <sub>1</sub>	op <sub>2</sub>
1.	True	False
2.	False	True

- not operator is used with other operator.

eg- not >, not in, is not

eg:- not true  
False

eg: not 100  
False

eg:- not false  
True

eg:- not 0 (zero)  
True

### Summary:

til now

we covered

Aithmetic  $\rightarrow +, -, *, /, \%, **$

Relational  $\rightarrow > < = < == < !=$

Logical  $\rightarrow$

conditional  $\rightarrow$

### # Membership operators:-

$\rightarrow$  Membership operator is binary operator.

$\rightarrow$  This operator requires two operands.

$\rightarrow$  Membership operator is denoted using "in" keywords.

1) in

2) Not in.

$\rightarrow$  Membership operator is used with collection data type for searching given values in collection values.



Synt:- Value/object in collection.

\* In operator returns Boolean values (T/F)

eg:- "a" in "Java"

→ True.

eg:- "python" in "best programming lang. is python".

→ True.

eg:- 10 in [10, 20, 30, 40]

→ True

eg:- 100 in [10, 20, 200, 300].

False.

eg:- "nareesh-it.com" in ["suresh.com", "nxy@gmail.com"]

False.

# not in operator:-

eg:- 10 not in [10, 20, 30, 40]

⇒ False.

eg:- 100 not in [10, 20, 30, 40]

⇒ True

# Ex:- W.A.P to find the input character is vowel or not.

Soln:- char = input("enter the any character")

print("vowel") if ch in "aeiouAEIOU" else print("not vowel")

o/p enter the any character a  
True (vowel)



## # Identity Operator:-

- ↳ It is also binary operator.
- ↳ Identity operator is represented using "is" keyword.
- ↳ Identity operator is used to compare references or identity of object.

- 1) is .
- 2) is not .

\* "is" operator returns "True", if two variables pointing to same object inside memory, else return False.

\* "is not" operator returns "True" if two variables are not pointing to same object inside memory, else return false.

FAQ: What is the difference b/w == and "is" operator in python?

==	is
It is relational operator	It is identity operator.
This operation is used to compare values of object (OR) object equality	This operator is used to compare identity or obj. If two variables are pointing the same object in memory this operator returns True else return False.



Ex:  $\Rightarrow a = 10$   
 $\Rightarrow b = 20$   
 $\Rightarrow a == b$   
False.

### # Walrus operator (Python 3.8)

$\bullet$   $:=$  (colon and equal to) is called walrus operator as assignment expression operator.