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1. Check if a number is positive, negative, or zero
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a=int(input("enter a number:"))
if a>0:
 print("number is positive")
elif a<0:
 print("number is negative ")
else:
 print("number is true")
OUTPUT:
enter a number:-9
number is negative
2. Find the largest among three numbers
a=int(input("enter a number:"))
b=int(input("enter b number:"))
c=int(input("enter c number:"))
if (a>b \text{ and } a>c):
  print("The largest number is:",a)
elif (b>a and b>c):
  print("The largest number is:",b)
elif (c>a and c>b):
   print("The largest number is:",c)
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else:
  print("number is true")else:
  print("number is true")
OUTPUT:
enter a number:10
enter b number:20
enter c number:30
The largest number is: 30
3. Check if a character is a towel
a=input("enter a character:")
vowels=['a','e','i','o','u']
if a in vowels:
  print("character is vowel")
else:
  print("character is not a vowel")
OUTPUT:
enter a character: d
character is not a vowel
4. Check whether a number is even and divisible by 5
a=int(input("Enter a number:"))
if(a\%2==0 and a\%5==0):
 print("condition is true")
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else:
 print("condition is false")
OUTPUT:
Enter a number: 10
condition is true
5. Electricity Bill Calculator
bill=int(input("enter a amount of bill:"))
if(bill<100):
total=bill*5
elif(bil1<200):
total=bill*7
else:
total=bill*10
print("total amount of bill after multiplication:",total)
OUTPUT:
enter a amount of bill:300
total amount of bill after multiplication: 3000
6.student grade calculation
marks = int(input("Enter marks: "))
if marks >= 35:
  if marks >= 92 and marks <= 100:
     print("A+ grade")
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elif marks >= 71 and marks < 92:
     print("B grade")
  elif marks >= 51 and marks < 71:
     print("C grade")
  elif marks >= 35 and marks < 51:
     print("You just passed with pass marks")
  else:
     print("You can enter only up to 100")
else:
  print("You are failed")
OUTPUT:
Enter marks: 99
A+ grade
7.check login credentials
username="devi"
password=1305
user_name=str(input("enter a username:"))
pass_word=str(input("enter a password:"))
check1=username==username
check2=password==password
valid=check1*check2
match="succefull login "* valid+"failed login"*(1-valid)
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print(match)
OUTPUT:
enter a username:likki
enter a password:1822
succefull login
8.simple calculator
a=5
b=10
c=15
print(a+b)
print(a*b)
print(a-b)
print(a/b)
OUTPUT:
15
50
-5
0.5
9.check if number in list
a=int(input("enter a number:"))
list=[10,20,30,40,50]
if(a in list):
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print("number is in a list")
else:
 print("number is not in a list")
OUTPUT:
enter a number:30
number is in a list
10.check string is a palindrome or not
str1=input("enter a string:")
if str1==str1[::-1]:
print("str is a palindrome")
else:
print("str is not a palindrome")
OUTPUT:
enter a string: devi
str is not a palindrome.
11.check if a number is within a range
num=int(input("enter a number:"))
num1=10
num2=50
if(num1 <= 50 and num2 >= 10):
print("num is in between 1 and 50")
else:
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print("num is not in between 1 and 50")
OUTPUT:
enter a number: 20
num is in between 1 and 50
12.Determine age group
age=int(input("enter a age:"))
if(age<13):
print("child")
elif(age>13 and age<19):
  print("teen")
elif(age>19 and age<59):
  print("adult")
else:
  print("senior")
OUTPUT:
enter a age:80
senior.
13.compare two strings
str1="devi"
str2="likki"
print(str1.upper())
print(str2.lower())
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OUTPUT:
DEVI
likki
14. Traffic Light Simulator
signal=input("enter a signal color:")
if(signal=="green"):
 print("go")
elif(signal=="yellow"):
 print("get ready to go")
else:
  print("stop")
OUTPUT:
enter a signal color: red
stop
15.ATM Withdrawal Simulation
aval_balance=10000
withdrawal_amt=1000
total_amount=(withdrawal_amt*100)-aval_balance
print("aval_balance:",total_amount)
OUTPUT:
aval balance: 90000
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