

1. Which of the following operators is used to calculate remainder in a division?

Answer = %

2//3

0

6<<2

24

6&2

2

6|2

6

6. What does the finally keyword denotes in python?

A

7. What does raise keyword is used for in python?

A

8. Which of the following is a common use case of yield keyword in python?

C

9. Which of the following are the valid variable names?

A) _abc

C) abc2

10. Which of the following are the keywords in python?

A) yeild

B) raise

Python program to find the factorial of a number provided by the user.

change the value for a different result
num = 7

To take input from the user
#num = int(input("Enter a number: "))

```

factorial = 1

# check if the number is negative, positive or zero
if num < 0:
    print("Sorry, factorial does not exist for negative numbers")
elif num == 0:
    print("The factorial of 0 is 1")
else:
    for i in range(1,num + 1):
        factorial = factorial*i
    print("The factorial of",num,"is",factorial)

```

The factorial of 7 is 5040

Program to check if a number is prime or not

```

num = 29

# To take input from the user
#num = int(input("Enter a number: "))

# define a flag variable
flag = False

# prime numbers are greater than 1
if num > 1:
    # check for factors
    for i in range(2, num):
        if (num % i) == 0:
            # if factor is found, set flag to True
            flag = True
            # break out of loop
            break

# check if flag is True
if flag:
    print(num, "is not a prime number")
else:
    print(num, "is a prime number")

```

29 is a prime number

Program to check if a string is palindrome or not

```

my_str = 'aIbohPhoBiA'

# make it suitable for caseless comparison
my_str = my_str.casefold()

# reverse the string

```

```
rev_str = reversed(my_str)
```

```
# check if the string is equal to its reverse
```

```
if list(my_str) == list(rev_str):  
    print("The string is a palindrome.")  
else:  
    print("The string is not a palindrome.")
```

The string is a palindrome.

```
def pythagoras(opposite_side,adjacent_side,hypotenuse):  
    if opposite_side == str("x"):  
        return ("Opposite = " + str(((hypotenuse**2) -  
(adjacent_side**2))**0.5))  
    elif adjacent_side == str("x"):  
        return ("Adjacent = " + str(((hypotenuse**2) -  
(opposite_side**2))**0.5))  
    elif hypotenuse == str("x"):  
        return ("Hypotenuse = " + str(((opposite_side**2) +  
(adjacent_side**2))**0.5))  
    else:  
        return "You know the answer!"
```

```
print(pythagoras(3,4,'x'))  
print(pythagoras(3,'x',5))  
print(pythagoras('x',4,5))  
print(pythagoras(3,4,5))
```

```
Hypotenuse = 5.0  
Adjacent = 4.0  
Opposite = 3.0  
You know the answer!
```

```
string=input("Enter the string ")  
freq=[None]*len(string)
```

```
for i in range(0,len(string)):  
    freq[i]=1  
    for j in range(i+1,len(string)):  
        if(string[i]==string[j]):  
            freq[i]=freq[i]+1  
  
    string=string[:j]+'0'+string[j+1:]
```

```
print("Character and their frequency");  
for i in range(0,len(freq)):  
    if(string[i]!=' ' and string[i]!='0'):  
        print(string[i]+"="+str(freq[i]))
```