BASIC PYTHON PROGRAMS

By : @curious--programmer

1] python programe to print Half paraymid of *

program :

```
print ("Half paraymid of stars : ")
for i in range(5):
    for J in range(i+1):
        print ("*", end = " ")
    print()
```

output :

```
*
**
***
****
*****
```

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2] python program to swap two variables.

program :

```
xx = 10
y = 20
xx, y = y, xx
print ("value of xx :", xx)
print ("value of y :", y)
```

output:

```
value of xx : 20
value of y = 10
```

3] python program to print fibonnaci series upto nth term.

program :
```
n = int(input("enter the value of 'n' :"))
a = 0
b = 1
sum = 0
count = 1
print("fibonacci series :", end = " ")
while (count <=n):
    print(sum, end = " ")
    count +=1
    a = b
    b = sum
    sum = a + b
```
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output : fibonacci series : 0 1 1 2 3

4] python program to find maximum of two numbers.

program :
```
def maximum(a,b):
    if a>=b:
      return a
    else:
        return b
```
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```
x = 100
y = 700
print(maximum(x,y))
```

output : 700

5] python program to find square of any natural number.

program :
```
def square(n):
    print("the square of number is :", n*n)

n = int(input("enter number :"))
square(n)
```

output :
```
enter number: 5
the square of number is : 25
```

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6] python program to genrate a random number :

program :
```
import random
print(random.randint(0,9))
```

output : 7

7] python program to calcuate area of triangle

program :
```
side1 = 5
side2 = 6
side3 = 7
#calcuating semi-perimeter
s = (a+b+c)/2
#calcuating area
area = (s*(s-side1)*(s-side2)*(s-side3))**0.5
print("area of triangle is %0.2f" %area)
```

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8] python program to find ASCII value of the charcter

program: c = 'p'

print ("the ASCII value of '" + c + "' is", ord(c))

output: The ASCII value of p is 112.

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9] python program to display a calander.

program: #importing calander module

import calander

yy = 2014 #year

mm = 11 # month

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#displaying calander

print (calander.month (yy, mm)

output:

November 2014

MO	TU	WE	TH	FR	SA	SU
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

19] python program to add two matrices.

program:
```
x = [[12, 7, 3],
     [4, 5, 6],
     [7, 8, 9]]

y = [[5, 8, 1],
     [6, 7, 3],
     [4, 5, 9]]

result = [[0, 0, 0],
          [0, 0, 0],
          [0, 0, 0]]

for i in range(len(x)):
    for j in range(len x[0])):
        result[i][j] = x[i][j] + y[i][j]

for r in result:
    print(r)
```

Output:
```
[[17, 15, 4],
 [10, 12, 9],
 [11, 13, 18]]
```

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11] python program to make a simple Calualetor.

program :

```
#this function adds two numbers
def add(x,y):
    return x+y
# this function substract two numbers
def substract(x,y):
    return x-y
# this function multiply two numbers
def multiply(x,y):
    return x*y
# this function divides two numbers
def divide(x,y):
    return(x/y)

print("select operation")
print("1. Add")
print("2. substract")
print("3. multiply")
print("4. divide")
```

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SWIPE →→

```
while True:
    choice = input ("enter choice (1/2/3/4) : ")
    if choice in ('1', '2', '3', '4'):
        num1 = float (input ("enter first number ")
        num2 = float (input ("enter second number")

        if choice == '1':
            print(num1, "+" num2, "=" add (num1, num2)

        elif choice == '2':
            print(num1, "-" num2, "=" substract (num1, num2)

        elif choice == '3':
            print (num1, "*", num2, " = " multiply (num1, num2)

        elif (hoice == '4':
            print (num1, "/", num2, " = " divide (num1, num2)

        next_calcuation = input ("want to do another calcuation
                                  (yes/no) : ")
        if calcuation == "no":
            break
```

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output : Select operation.

1. add
2. ~~multiply~~ substract
3. multiply
4. divide

enter choice(1/2/3/4): 4

enter first number : 30
enter second number: 3

30.0 / 3.0 = 10.0