



Python Practical's

TASK 2

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Practical 1

1. WRITE A PYTHON PROGRAM TO FIND WHETHER THE GIVEN NUMBER IS PERFECT OR NOT .

```
sum=0
for i in range(1,number):
    if number%i==0:
        sum+=i

if sum==number:
    print(f"{number} is perfect number")
else:
    print(f"{number} is not perfect number")
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical1.py
Enter Number 6
6 is perfect number
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> █
```

Practical 2

WRITE A PYTHON PROGRAM TO FIND THE GIVEN NUMBER IS PALINDROME OR NOT .

```
number=int(input("Enter The number "))
num2=number
reverse=""
while num2 > 0:
    digit=str(int(num2%10))
    reverse+=digit
    num2//=10
if reverse==str(number):
    print(f"{number} is Pellindrom number")
else:
    print(f"{reverse} is not a Pellindrom number")
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical2.py
Enter The number 8
8 is Pellindrom number
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> █
```

Practical 3

WRITE A PYTHON PROGRAM TO DISPLAY THE FOLLOWING PATTERN

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

```
n=int(input("Enter Number: "))  
for i in range(1,n+1):  
    for j in range(i):  
        print("*",end="")  
    print()
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical3.py  
Enter Number: 5  
*  
**  
***  
****  
*****
```

Practical 4

WRITE A PYTHON PROGRAM TO TAKE TWO NUMBERS FROM USER AND APPLY INBUILT FUNCTION TO FIND ABSOLUTE OF NO, CEIL OF NUMBER, FLOOR, MAX, MIN, POWER, SQRT, ROUND OFF THE TWO NUMBERS.

```
import math  
num1=int(input("Enter Number 1 "))  
num2=int(input("Enter Number 2 "))  
  
# Applying functions  
print(f"Absolute of {num1}/{num2}:",abs(num1/num2))  
print(f"Ceil of : {num1}/{num2}:",math.ceil(num1/num2))  
print(f"floor of : {num1}/{num2}:",math.floor(num1/num2))  
print(f"Max between : {num1} and {num2}:",max(num1,num2))  
print(f"Min between : {num1} and {num2}:",min(num1,num2))  
print(f"power of : {num1} is {pow(num1,2)} and {num2} is {pow(num2,2)}")  
print(f"sqrt of: {num1} is {math.sqrt(num1)} and {num2} is {math.sqrt(num2)}")  
print(f"Round off Of {num1}/{num2} is {round(num1/num2,2)}")
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical4.py  
Enter Number 1 10  
Enter Number 2 7  
Absolute of 10/7: 1.4285714285714286  
Ceil of : 10/7: 2  
floor of : 10/7: 1  
Max between : 10 and 7: 10  
Min between : 10 and 7: 7  
power of : 10 is 100 and 7 is 49  
sqrt of: 10 is 3.1622776601683795 and 7 is 2.6457513110645907  
Round off Of 10/7 is 1.43
```

Practical 5

WRITE A PYTHON PROGRAM TO GENERATE 20 NUMBERS RANDOMLY IN BETWEEN 41 TO 75.

```
import random
for i in range(41,76):
    print(random.randrange(41,76),end=" ")
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical5.py
42 51 72 55 63 47 73 42 53 78 67 68 42 46 63 75 58 71 48 75 52 44 57 69 54 72 57 46 62 44 65 49 55 57 42
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> █
```

Practical 6

WRITE A PYTHON PROGRAM TO FIND INPUT STRING IS ALPHABET, NUMERIC AND ALPHANUMERIC OR IS SPACE.

```
testString=input("Enter Something... ")

print(f"{testString} is Alphabet: {testString.isalpha()}")
print(f"{testString} is Numeric: {testString.isnumeric()}")
print(f"{testString} is Alpha Numeric: {testString.isalnum()}")
print(f"{testString} is Space: {testString.isspace()}")
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical6.py
Enter Something... Hello,There 123
Hello,There 123 is Alphabet: False
Hello,There 123 is Numeric: False
Hello,There 123 is Alpha Numeric: False
Hello,There 123 is Space: False
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> █
```

Practical 7

WRITE A PYTHON PROGRAM TO IMPLEMENTS FUNCTION ON THE STRING

- CAPITALIZE
- CENTER
- COUNT
- FIND
- LOWER
- UPPER
- REPLACE
- SPLIT
- SWAP-CASE

```
testString=input("Enter String: ")

print(f"Capitalize: {testString.capitalize()}")
print(f"Center: {testString.center(50)}")
print(f"count: {testString.count('s')}")
print(f"find: {testString.find('s')}")
print(f"lower: {testString.lower()}")
print(f"upper: {testString.upper()}")
print(f"replace: {testString.replace('M','S')}")
print(f"split: {testString.split(' ')}")
print(f"swap-case: {testString.swapcase()}")
```

Output:

```
PS D:\LEARNING\COLLAGE\SAM7\Python\collage\task2> py practical7.py
Enter String: Smit Joshi
Capitalize: Smit joshi
Center:                Smit Joshi
count: 1
find: 7
lower: smit joshi
upper: SMIT JOSHI
replace: Smit Joshi
split: ['Smit', 'Joshi']
swap-case: SMIT jOSHI
```