Python Program to find the factorial of a number using loop.

```
n=int(input("Enter number:"))
fact=1
while(n>0):
  fact=fact*n
  n=n-1
print("Factorial of the number is: ")
print(fact)
```

```
Enter number:5
Factorial of the number is:
120
```

Python Program to reverse a number using loop

```
r=0
n=int(input("Enter a number: "))
while(n>0):
  dig=n%10
  r=r*10+dig
  n=n//10
print("The reversed no  is:")
print(r)
```

```
Enter a number: 123
The reversed no  is:
321
```

Write a Python program to construct the pattern, using a neste

```
n=5;
for i in range(n):
  for j in range(i):
      print ('* ', end="")
```

```
  print('')

for i in range(n,0,-1):
  for j in range(i):
    print('* ', end="")
  print('')
```

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

Python Program to replace all occurrences of ‘a’ with ‘$’ in a st

```
string=input("Enter string:")
string=string.replace('a','$')
string=string.replace('A','$')
print("Modified string:")
print(string)
```

```
Enter string:abab
Modified string:
$b$b
```

Python Program to remove the nth index character from a non-

```
def remove(string, n):
  first = string[:n]
  last = string[n+1:]
  return first + last
string=input("Enter the sring:")
n=int(input("Enter the index of the character to remove:"))
```

```
n=int(input("Enter the index of the character to remove: "))
print("Modified string:")
print(remove(string, n))
```

```
Enter the sring:hello world
Enter the index of the character to remove:2
Modified string:
helo world
```

Python Program to detect if two strings are anagrams.

```
s1=input("Enter first string:")
s2=input("Enter second string:")
if(sorted(s1)==sorted(s2)):
  print("The strings are anagrams.")
else:
  print("The strings aren't anagrams.")
```

```
Enter first string:listen
Enter second string:silent
The strings are anagrams.
```

Python Program to form a string where the first character and been exchanged.

```
def change(string):
  return string[-1:] + string[1:-1] + string[:1]
string=input("Enter string:")
print("Modified string:")
print(change(string))
```

```
Enter string:student
Modified string:
ttudens
```

Python Program to count number of vowels from a non-empty

```
string=input("Enter string:")
vowels=0
for i in string:
  if(i=='a' or i=='e' or i=='i' or i=='o' or i=='u' or i=='A' or i=='E'
     or i=='I' or i=='O' or i=='U'):
      vowels=vowels+1
print("Number of vowels are:")
print(vowels)
```

```
Enter string:friends
Number of vowels are:
2
```

Program for Divide by zero error detection

```
flag = True

def div(a, b):
  try:
    print("Finally the division of %d/%d is %f" % (a, b,a/b))
    global flag
    flag=False
  except ZeroDivisionError:
    print("Zero Division Error detected")
  else:
    print("Division is successful")
  finally:
    if flag is True:
      print("Try again")
    else:
      print("Thank you")

while flag is True:
  div(int(input("Enter numerator")),int(input("Enter denominator")))
```

```
Enter numerator5
Enter denominator0
Zero Division Error detected
Try again
Enter numerator5
Enter denominator2
Finally the division of 5/2 is 2.500000
Division is successful
Thank you
```

Program for ValueError error detection

```
while True:
  try:
    x = int(input("Please enter a number: "))
    print(" That was valid number. Thank you")
    break
  except ValueError:
    print("Oops!  That was no valid number.  Try again...")
```

```
Please enter a number: k
Oops!  That was no valid number.  Try again...
Please enter a number: 20
 That was valid number. Thank you
```