In [1]:
```
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:6
Factorial of the number is:
720
```

In [2]:
```
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: 1245
The reversed no  is:
5421
```

In [3]:
```
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('')
```

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

In [4]:
```
string=input("Enter string:")
string=string.replace('a','$')
string=string.replace('A','$')
print("Modified string:")
print(string)
```

```
Enter string:sathvik
Modified string:
s$thvik
```

In [5]:
```
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:"))
print("Modified string:")
print(remove(string, n))
```

```
Enter the sring:sathvik
Enter the index of the character to remove:2
Modified string:
sahvik
```

In [6]:
```
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:sathvik
Enter second string:sathvik
The strings are anagrams.
```

In [7]:
```
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:sfsdgs
Enter second string:sathvik
The strings aren't anagrams.
```

In [8]:
```
def change(string):
      return string[-1:] + string[1:-1] + string[:1]
string=input("Enter string:")
print("Modified string:")
print(change(string))
```

```
Enter string:sathvik
Modified string:
kathvis
```

In [10]:
```
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
            vowels=vowels+1
print("Number of vowels are:")
print(vowels)
```

```
Enter string:sathvik shetty
Number of vowels are:
3
```

In [20]:
```
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 numerator3
Enter denominator0
Zero Division Error detected
Try again
Enter numerator36
Enter denominator6
Finally the division of 36/6 is 6.000000
Division is successful
Thank you
```

In [21]:
```
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: r
Oops!  That was no valid number.  Try again...
Please enter a number: 567
 That was valid number. Thank you
```