In [1]:
```
n = int(input('n='))
i = 1

while(i <= 10):
    print(n,'X',i,'=',n*i)
    i = i + 1
print('done')
```

```
n=5
5 X 1 = 5
5 X 2 = 10
5 X 3 = 15
5 X 4 = 20
5 X 5 = 25
5 X 6 = 30
5 X 7 = 35
5 X 8 = 40
5 X 9 = 45
5 X 10 = 50
done
```

In [7]:
```
n = int(input('n= '))
#the for loop

for i in range(1,11):
    print(n,'X',i,'=',n*i)
print('done')
```

```
n= 8
8 X 1 = 8
8 X 2 = 16
8 X 3 = 24
8 X 4 = 32
8 X 5 = 40
8 X 6 = 48
8 X 7 = 56
8 X 8 = 64
8 X 9 = 72
8 X 10 = 80
done
```

In [5]:
```
# INFINITE LOOP - INTERRUPT THIS CELL

result = 1
i = 1

while i <= 100:
    result = result * i
    print(result)
    i += 1
    #forgot to increment i
```

```
1
2
6
24
120
720
5040
40320
362880
3628800
39916800
479001600
6227020800
87178291200
1307674368000
20922789888000
355687428096000
6402373705728000
121645100408832000
```

In [6]:
```
i = 1
result = 1

while i<= 100:
    result *= i
    if i == 42:
        print('Magic number 42 reached! Stopping execution..')
        break
    i += 1
print('i:', i)
print('result:',result)
```

```
Magic number 42 reached! Stopping execution..
i: 42
result: 1405006117752879898543142606244511569936384000000000
```

In [7]:
```
i = 1
result = 1

while i < 20:
    i += 1
    if i % 2 == 0:
        print('Skipping {}'.format(i))
        continue
    print('Multiplying with {}'.format(i))
    result = result * 1

print('i:',i)
print('result:',result)
```

```
Skipping 2
Multiplying with 3
Skipping 4
Multiplying with 5
Skipping 6
Multiplying with 7
Skipping 8
Multiplying with 9
Skipping 10
Multiplying with 11
Skipping 12
Multiplying with 13
Skipping 14
Multiplying with 15
Skipping 16
Multiplying with 17
Skipping 18
Multiplying with 19
Skipping 20
i: 20
result: 1
```

In [8]:
```
i = 1
result = 1

while i < 20:
    i += 1
    if i % 2 != 0:
        print('Skipping {}'.format(i))
        continue
    print('Multiplying with {}'.format(i))
    result = result * 1

print('i:',i)
print('result:',result)
```

```
Multiplying with 2
Skipping 3
Multiplying with 4
Skipping 5
Multiplying with 6
Skipping 7
Multiplying with 8
Skipping 9
Multiplying with 10
Skipping 11
Multiplying with 12
Skipping 13
Multiplying with 14
Skipping 15
Multiplying with 16
Skipping 17
Multiplying with 18
Skipping 19
Multiplying with 20
i: 20
result: 1
```

In [9]:
```
# Looping over a string
for char in 'Wednesday':
    print(char)
```

```
W
e
d
n
e
s
d
a
y
```

In [10]:
```
# Looping over a string
for char in 'Saturday':
    print(char)
```

```
S
a
t
u
r
d
a
y
```

In [11]:
```
for i in range(7):
    print(i)
```

```
0
1
2
3
4
5
6
```

In [12]:
```
for i in range(3,10):
    print(i)
```

```
3
4
5
6
7
8
9
```

In [13]:
```
for i in range (3,14,4):
    print(i)
```

```
3
7
11
```

In [14]:
```
days = ['Monday','Tuesday','Wednesday','Thrusday','Friday']

for day in days:
    print(day)
```

```
Monday
Tuesday
Wednesday
Thrusday
Friday
```

In [15]:
```
# Looping over a tuple
for fruit in ['Apple','Banana','Guava']:
    print("Here's a friut:",fruit)
```

```
Here's a friut: Apple
Here's a friut: Banana
Here's a friut: Guava
```

In [18]:
```
a_list = ['Monday','Tuesday','Wednesday','Thrusday','Friday']

for i in range(len(a_list)): #range(5)
    print('The value at position {} is {}:'.format(i,a_list[i]))
```

```
The value at position 0 is Monday:
The value at position 1 is Tuesday:
The value at position 2 is Wednesday:
The value at position 3 is Thrusday:
The value at position 4 is Friday:
```

In [20]:
```
for i, val in enumerate(a_list):
    print('The value at position {} is {}:'.format(i,val))
```

```
The value at position 0 is Monday:
The value at position 1 is Tuesday:
The value at position 2 is Wednesday:
The value at position 3 is Thrusday:
The value at position 4 is Friday:
```

In [ ]:
```

```