Question 1.

Modify your greeting program so that if the user does not enter a name (i.e. they just press enter), the program responds "Hello, Stranger!". Otherwise it should print a greeting with their name as before.

```
In [5]: name=input("Whats your name?")

if name=="":
    print("Hello, Stranger!")
else:
    print("Hello,",name,"!")
```

Hello, pro !

Question 2.

Write a program that simulates the way in which a user might choose a password. The program should prompt for a new password, and then prompt again. If the two passwords entered are the same the program should say "Password Set" or similar, otherwise it should report an error.

```
In [9]: pas=input("Please enter a password")
check=input("Please Re-enter your password")
if pas==check:
    print("Your Password has been set")
else:
    print("An error has been occured")
```

Your Password has been set

Question 3.

Modify your previous program so that the password must be between 8 and 12 characters (inclusive) long.

```
In [2]: pas=input("Please enter a password between 8-12 letters")
check=input("Please Re-enter your password")
#if len( pas ) >=8 and len(pas) <=12 :
if 8<= len(pas) <=12:
    if pas==check:
        print("Your Password has been set")
    else:
        print("Error, Password doesn't match")
else:
    print("Password Length doesn't match")
```

Password Length doesn't match

Question 4.

Modify your program again so that the chosen password cannot be one of a list of common passwords, defined thus:
BAD_PASSWORDS = ['password', 'letmein', 'sesame', 'hello', 'justinbieber']

```
In [53]: pas=input("Please enter a password between 8-12 letters")
check=input("Please Re-enter your password")
BAD_PASSWORDS = ['password', 'letmein', 'sesame', 'hello', 'justinbieber']
if 8<= len(pas) <=12:
#if len( pas ) >=8 and len(pas) <=12 :
    if pas in BAD_PASSWORDS:
        print("Password cannot be among Common Passwords. for example: ['password', 'letmein', 'sesame', 'hello
    else:
        if pas==check:
            print("Your Password has been set")
        else:
            print("Error, Password doesn't match")
else:
    print("Password Length doesn't match")
```

Password cannot be among Common Passwords. for example: ['password', 'letmein', 'sesame', 'hello', 'justinbieber']

Question 5.

Modify your program a final time so that it executes until the user successfully chooses a password. That is, if the password chosen fails any of the checks, the program should return to asking for the password the first time.

```
In [55]: while True:
    pas=input("Please enter a password between 8-12 letters")
    check=input("Please Re-enter your password")
    BAD_PASSWORDS = ['password', 'letmein', 'sesame', 'hello', 'justinbieber']
    if 8<= len(pas) <=12:
    #if len( pas ) >=8 and len(pas) <=12 :
```

```
            if pas in BAD_PASSWORDS:
                print("Password cannot be among Common Passwords. for example: ['password', 'letmein', 'sesame', 'h
            else:
                if pas==check:
                    print("Your Password has been set")
                    break
                else:
                    print("Error, Password doesn't match")
        else:
            print("Password Length doesn't match")
```

```
Password Length doesn't match
Password Length doesn't match
Your Password has been set
```

Question 6.

Write a program that displays the "Seven Times Table". That is, the result of multiplying 7 by every number from 0 to 12 inclusive. The output might start: 0 x 7 = 0 1 x 7 = 7 2 x 7 = 14 and so on.

In [57]:
```python
for num in range(13):
    mul=num*7
    print(num,"* 7 =",mul)
```

```
0 * 7 = 0
1 * 7 = 7
2 * 7 = 14
3 * 7 = 21
4 * 7 = 28
5 * 7 = 35
6 * 7 = 42
7 * 7 = 49
8 * 7 = 56
9 * 7 = 63
10 * 7 = 70
11 * 7 = 77
12 * 7 = 84
```

Question 7.

Modify your "Times Table" program so that the user enters the number of the table they require. This number should be between 0 and 12 inclusive.

In [60]:
```python
calc=int(input("Enter a number of the table you require."))
for num in range(13):
    mul=num*calc
    print(num,"*",calc, "=",mul)
```

```
0 * 12 = 0
1 * 12 = 12
2 * 12 = 24
3 * 12 = 36
4 * 12 = 48
5 * 12 = 60
6 * 12 = 72
7 * 12 = 84
8 * 12 = 96
9 * 12 = 108
10 * 12 = 120
11 * 12 = 132
12 * 12 = 144
```

Question 8.

Modify the "Times Table" again so that the user still enters the number of the table, but if this number is negative the table is printed backwards. So entering "-7" would produce the Seven Times Table starting at "12 times" down to "0 times".

In [1]:
```python
calc=int(input("Enter a number of the table you require."))
if calc>=0:
    for num in range(13):
        mul=num*calc
        print(num,"*",calc, "=",mul)
else:
    for num in range(12,-1,-1):
        mul=num*calc
        print(num,"*",calc, "=",mul)
```

```
 0 * 6 = 0
 1 * 6 = 6
 2 * 6 = 12
 3 * 6 = 18
 4 * 6 = 24
 5 * 6 = 30

 6 * 6 = 36
 7 * 6 = 42
 8 * 6 = 48
 9 * 6 = 54
10 * 6 = 60
11 * 6 = 66
12 * 6 = 72
```

In [ ]: