**More elif and else Statements**

When do we need to use the **elif** statement? Consider this example:

x = int(input("Enter a number: "))

if x > 5: # if x is greater than 5

print ("A" )

if x > 0: # if x is greater than zero.

print ("B" )

What will this code print when I enter a value of 7 ? Test it out!

Answer:

Since x is greater than 5, it prints “A”.

Since x is also greater than 0, it will print “B”.

So this code will print A and then B.

Now try this code and see if you can see the difference:

x = int(input("Enter a number: "))

if x > 5:

print ("A" )

elif x > 0:

print ("B" )

Now what will this code print when I enter a value of 7 ? Again, test it out!

This code will print either A or B. The elif (short for *else if*) means “if it does not fit the above condition”. Because of the elif, it will never print both A and B.

Exercise

1. Run this code then answer the questions below.

x = int(input("Enter a number: "))

if x > 0:

print ("A" )

elif x > 2:

print ("B" )

1. When (i.e. for what values of x) does the code output “A” ?
2. When does the code output “B” ?
3. Consider this code:

x = int(input("Enter a number: "))

if x < 10:

print ("A" )

elif x > 5:

print ("B" )

elif x >= 0:

print ("C" )

print ("D" )

1. When does the code output “A” ?
2. When does the code output “B” ?
3. When does the code output “C” ?
4. When does the code output “D” ?
5. What does the code output when you enter the number 7?
6. Consider this code:

x = int(input("Enter a number: "))

if x < 10:

print ("A" )

if x > 5:

print ("B" )

if x >= 0:

print ("C" )

print ("D" )

1. When does the code output “A” ?
2. When does the code output “B” ?
3. When does the code output “C” ?
4. When does the code output “D” ?
5. What does the code output when you enter the number 7?
6. Consider this code:

x = int(input("Enter a number: "))

if x < 0:

print ("A" )

if x > 5:

print ("B" )

else:

print ("C" )

print ("D" )

1. When does the code output “A” ?
2. When does the code output “B” ?
3. When does the code output “C” ?