1. \( x = 5 \)
   if \( x < 15 \):
   if \( x > 8 \):
   print('one')
   else:
   print('two')
   else:
   print('three')

   What is printed?
   A one
   B two
   C three
   D More than one of "one", "two" or "three"
   E Nothing is printed

Answer: C. if-else statements can be nested. Here we first evaluate \( x < 15 \). That is True so we next evaluate \( x > 8 \). That is False so we print 'two'. Regardless of the value of \( x \) only one of 'one', 'two', or 'three' will be printed.

2. \( x = 5 \)
   if \( x < 15 \):
   if \( x > 8 \):
   print('one')
   else:
   print('two')
   else:
   print('three')

   What is printed?
   A one
   B two
   C three
   D More than one of "one", "two" or "three"
   E Nothing is printed
3. if temperature > 0:
   print("above freezing")
elif temperature == 0:
   print("at freezing")
else:
   print("below freezing")

True or false: The code below does exactly the same thing as the code above?

if temperature == 0:
   print("at freezing")
elif temperature <= 0:
   print("below freezing")
else:
   print("above freezing")

A True
B False

4. if temperature > 0:
   print("above freezing")
elif temperature == 0:
   print("at freezing")
else:
   print("below freezing")

True or false: The code below does exactly the same thing as the code above?

if temperature == 0:
   print("at freezing")
elif temperature <= 0:
   print("below freezing")
else:
   print("above freezing")

A True
B False

Answer: A. Although the second version uses <=, because of the ordering of if-else branches, the elif will only be evaluated if temperature != 0. Thus it is equivalent to temperature < 0.