# Sample Final Exam 

Name $\qquad$
Answer ALL questions. Each question is worth 10 points.

1. Which of the following identifiers are valid in Python? Which are not? If not, why not?
a. his Dog
b. your*Dog
c. _2Dogs
d. His3Dogs
e. noDogs
2. What will the following program print?
$x=45$
$y=3$
$z=x / 5+y$ * 8
print("x = ", z)
print("y = ", y)
print("z = ", x)
3. Write a program that asks the user for a grade between 0 and 100. If you enter a number less than 0 or greater than 100, it will print an error message.

If you enter a number between 90 and 99 , it will print $A$; if you enter a number between 80 and 89 , it will print $B$; if you enter a number between 70 and 79, it will print C;
if you enter a number between 60 and 69 , it will print $D$;
if you enter a number between 0 and 59 , it will print $F$.
4. What will the following program print?
i $=1$
j $=14$
for $k$ in range (i+7, $j+1$ ) : print("X = ", k)
5. If the user enters input of 5 and 15 respectively, what will the following program print?
x = int(input("Enter an integer?"))
$y=$ int(input("Enter an integer?"))
while $x<y$ :
print (x, " is not ", y)
$\mathrm{y}=\mathrm{y}-2$
6. Write a program that will ask the user for a number and then print the sentence "That's great!" that many times, e.g., if the user enters 5 , it will print the sentence 5 times.
7. What will the following program print? Write a \# in every place that a blank space would appear)
$\mathbf{x}=234.345$
$y=6518.3687$
$z=12318.5887$
print ("\%16.2f\n" \% (y))
print ("\%7.2f\n" \% (z))
print ("\%12.1F\n" \% (x) )
8. What will the following program print?
s = "This was a very long string"
i = s.find("very")
print("I = ", i)
t $=\mathbf{s}[i:]$
$s=s+t$
print(s)
print (t)
9. Write a program that will read numbers until the user types a negative number.
10. If the user enters the value 5 , what will the following program print?
import math
x = float(input("Enter an integer value?"))
$a=$ math.trunc (x)
b = math.ceil (x)
c = math.fabs (x)

