1.

a =5

b =6

c =a+b

2.

'2' + '5' produces '25'

3.

pi = 3.14

area = pi\*3\*3

perimeter =2\*pi\*3

4.

x = 123446754336788543835697

y = 3.14159265358979323846

x =float(x)

y =int(y)

5.

foobar ='"No, thanks, Mom,\" I said, \"I don't know how long it will take."'

6.

# Assign 'HelloWorld!' to variable a

a = 'HelloWorld!'

# b contains 'HelloWorld!HelloWorld!HelloWorld!HelloWorld!HelloWorld!'

b =

7.

greeting = "Hello Google!"

# number of characters stored in the variable greeting

number\_of\_char =len(greeting)

# repeat the greetings based on the number of character in 'greeting'

greetings=greeting\*number\_of\_char

8.

# Write a function, given a string of characters, return the string together with ‘\_'s of the same length.

def underline(title):

   return title + '\n' + len(title) \* '\_'

9.

# Use one or more string methods in above examples, extract the substring

# surrounded by 'xyz' at the beginning and end. Replace the ',' in the substring with '|'.

# and remove all trailing space.

str1  = 'abcefghxyzThis,is,the,target,string  xyzlkdjf'

idx1 = str1.find('xyz')                    # get the position of 'xyz'

idx2 = str1.find('xyz'  , idx1+1) # get the next 'xyz'

str1 = str1[idx1+3:idx2].replace(',','|'  ) # replace ',' with '|'

str1 = str1.strip()                           # strip trailing spaces.

10.

# Assign arbitrary values to the variables such that they are of the types used in the examples

a = 'str'

b = 1

c = 12.345

d = [10,20,30]

11.

B and D

12.

# Compute the sum and product of 2 complex numbers:

# (2+3j) and (4+5j)

a = (2+3j)

b = (4+5j)

sum\_ab = a+b

prod\_ab = a\*b

13.

# Write a function that does a decimal to hexadecimal conversion.

# Hint: Make use of "%x" for hexadecimal format.

def dec2hex(num):return str('0x' + '%.2x' % num)

14.

# Extract each word from 'greetings' and assign to

# variables 'first', 'middle' and 'last'.

greetings = "How are you"

first  = greetings[0 :3 ]

middle = greetings[ 4:7 ]

last   = greetings[8 :11 ]

15.

a = 25

b = int(031)

c = int(0x19)

16.

x = 1, y = 4

17.

<type 'int'>

18.

True