Kawsar Islam

1. (6 points) Write Python statement for each of the following questions

a) Find the product of the numbers 8, 9, and 10.

print (8\*9\*10)

b) Find the average age of five people around you using integer division.

age= (18+19+20+21+22)/5

print(age)

c) Compute 3 to the 110th power.

print(3\*\*110)

d) Compute the factorial of 13.

i=13

f=1

for x in range(1,n+1):

f=f+x

print(“Factorial of 13 = ”, f)

e) Find the volume of a sphere with a radius of 1 using the formula 4/3

Import math

r = 1

v= 4/(3\*math.pi\*r\*\*3)

print (“The volume of the sphere is: “, v)

f) Compute 1/3 of 15?

print((1/3)\*15)

2. (6 points) Answer each of the following questions

a) Which of the following are legal variable names:

(a) \_abc123

(b) 123abc

(c) abc123\_

(d) \_123

b) Consider the following statements:

idx = 0

idx = idx + 1

idx = idx + 2

What is the value of idx after Python evaluates these three statements?

3

c) What would the following display?

num = 99

num = 5

print(num)

5

d) If you execute these three lines of code, what will be printed?

my\_var1 = 7

my\_var2 = 5

print(my\_var1 % my\_var2)

2

e) What will be printed by the following:

x = 4

y = 5

print(x//y)

0

f) Given the expression 30 - 3 \*\* 2 + 8 // 3 \*\* 2 \* 10, what is the output of the

expression? Based on precedence and associativity of the operators in Python,

correctly parenthesize the expression such that you get the same output as above.

You get 21