CSC165 Introduction to Programming, Fall 2024
Quiz 02

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(10 + 1) =$ _____ $(9/3) =$ _____ $(1\%2) =$ _____

$(8<=5) =$ _____ $((3 + 5)<9) =$ _____ $(not(3==2)) =$ _____

2) Consider the code below.

```
1 x = _____
2 y = 6
3 if x <= y:
4     z = x
5     print(x)
6 else:
7     z = y
8     print(y)
```

Write a value for x at line #1 that would result in the execution of code block at line #4 and #5.

3) Write syntactically correct GUpPy code to meet the requirements below.

Place 2 tiles next to each other in a row. Place the first tile at column 6, row 6. Place the next tile either to the right or left of the first, depending on the roll. If the user rolls less than 4, place the tile to the left of the first. Otherwise, a roll of 4 or greater means place the tile to the right of the first. Tiles can be any color.

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(1 + 5) =$ _____ $(19/2) =$ _____ $(4\%2) =$ _____

$(3<=1) =$ _____ $((2 + 5)==12) =$ _____ $(not(6==3)) =$ _____

2) Consider the code below.

```
1 x = roll()
2 if x < 4:
3     Tile(RANDOM).place(x,6)
4     x = x 2
5 else:
6     Tile(RANDOM).place(x,10)
7     x = x - 2
```

State a roll() value for line #1 that would result in the execution of code block at line #3 and #4.

roll() = _____

3) Write syntactically correct GUpPy code to meet the requirements below.

Place 2 tiles stacked in a column. Place the first tile at column 4, row 4. Place the next tile either above or below the first, depending on the roll. If the user rolls greater than 3, place the tile above the first. Otherwise, a roll of 3 or less means place the tile below the first. Tiles can be any color.

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(3 + 4) =$ _____ $(19/2) =$ _____ $(9\%2) =$ _____

$(1<=1) =$ _____ $((5 + 8)==14) =$ _____ $(not(7==6)) =$ _____

2) Consider the code below.

```
1 color = _____
2 y = 2
3 if color == PINK:
4     Tile(color).place(0,y)
5     Tile(YELLOW).place(0,y+2)
6 else:
7     Tile(color).place(0,y)
8     Tile(PINK).place(0,y+2
```

State a color value for line #1 that would result in the execution of the code block at line #4 and #5.

color = _____

3) Write syntactically correct GUpPy code to meet the requirements below.

Places 2 tiles next to each other in a row. Place the first tile at a random location based on the roll. If the user rolls 3 or less, place the tile at column 0, row 0. Otherwise, a roll greater than 3 means place the first tile at column 2, row 2. Place the next tile to the right of the first tile. Tiles can be any color.

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(2 + 1) =$ _____ $(7/2) =$ _____ $(9\%2) =$ _____

$(9>=9) =$ _____ $((8 + 1)>4) =$ _____ $(not(3>4)) =$ _____

2) Consider the code below.

```
1 x = roll() + roll()
2 y = roll() + roll()
3 if x > 10:
4     x = 10
5 else:
6     x = 6
7 if y == 12:
8     y = 10
```

In the code above, circle the lines of code that will be executed if the value x is initialized to 9 and the value y is initialize to 12.

3) Write syntactically correct GUpPy code to meet the requirements below.

Place 2 tiles next to each other in a row. Place the first tile at column 6, row 6. Place the next tile either to the right or left of the first, depending on the roll. If the user rolls less than 4, place the tile to the left of the first. Otherwise, a roll of 4 or greater means place the tile to the right of the first. Tiles can be any color.

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(8 + 9) =$ _____ $(20/3) =$ _____ $(10\%2) =$ _____

$(9<=1) =$ _____ $((5 + 8)<14) =$ _____ $(not(3==10)) =$ _____

2) Consider the code below.

```
1 x = roll() * 2
2 y = roll() * 2
3 if x < 6:
4     dx = 2
5 else:
6     dx = -2
7 if y < 6:
8     dy = 2
9 else:
10     dy = -2
```

Circle the lines of code above that will be executed if the value x is initialized to 2.0 and the value y is initialize to 10.0.

3) Write syntactically correct GUpPy code to meet the requirements below.

Place 2 tiles stacked in a column. Place the first tile at column 4, row 4. Place the next tile either above or below the first, depending on the roll. If the user rolls greater than 3, place the tile above the first. Otherwise, a roll of 3 or less means place the tile below the first. Tiles can be any color.

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(4 + 5) =$ _____ $(15/3) =$ _____ $(6\%2) =$ _____

$(3<=6) =$ _____ $((10 + 1)==14) =$ _____ $(not(2>2)) =$ _____

2) Consider the code below.

```
1 x = _____
2 y = 6
3 if x <= y:
4     z = x
5     print(x)
6 else:
7     z = y
8     print(y)
```

Write a value for x in the blank at line #1 that would result in the execution of the code block at line #7 and #8.

3) Write syntactically correct GUpPy code to meet the requirements below.

Places 2 tiles next to each other in a row. Place the first tile at a random location based on the roll. If the user rolls 3 or less, place the tile at column 0, row 0. Otherwise, a roll greater than 3 means place the first tile at column 2, row 2. Place the next tile to the right of the first tile. Tiles can be any color.

NAME: June 3, 2024

1) For each expression below, write what it is equal to after being evaluated.

$(5 + 8) =$ _____ $(13/2) =$ _____ $(10\%2) =$ _____

$(9<=6) =$ _____ $((1 + 2)<20) =$ _____ $(not(5>1)) =$ _____

2) Consider the code below.

```
1 x = roll()
2 if x < 4:
3     Tile(RANDOM).place(x,6)
4     x = x + 2
5 else:
6     Tile(RANDOM).place(x,10)
7     x = x - 2
```

State a roll() value for line #1 that would result in the execution of the code block at line #6 and #7.

roll() = _____

3) Write syntactically correct GUpPy code to meet the requirements below.

Place 2 tiles next to each other in a row. Place the first tile at column 6, row 6. Place the next tile either to the right or left of the first, depending on the roll. If the user rolls less than 4, place the tile to the left of the first. Otherwise, a roll of 4 or greater means place the tile to the right of the first. Tiles can be any color.

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1) For each expression below, write what it is equal to after being evaluated.

$(6 + 3) =$ _____ $(12/2) =$ _____ $(7\%2) =$ _____

$(5>=3) =$ _____ $((5 + 6)>10) =$ _____ $(not(9<6)) =$ _____

2) Consider the code below.

```
1 color = _____
2 y = 2
3 if color == PINK:
4     Tile(color).place(0,y)
5     Tile(YELLOW).place(0,y+2)
6 else:
7     Tile(color).place(0,y)
8     Tile(PINK).place(0,y+2
```

State a color value for line #1 that would result in the execution of the code block at line #7 and #8.

3) Write syntactically correct GUpPy code to meet the requirements below.

Place 2 tiles stacked in a column. Place the first tile at column 4, row 4. Place the next tile either above or below the first, depending on the roll. If the user rolls greater than 3, place the tile above the first. Otherwise, a roll of 3 or less means place the tile below the first. Tiles can be any color.

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