

Assignment 4

The due date for submitting this assignment has passed.

Due on 2019-08-28, 23:59 IST.

Assignment submitted on 2019-08-28, 20:33 IST

1) Which of the following is a valid question that would be posed when 'Guess the Movie Name' game is played with the movie "SKYSCRAPER"? 1 point

- ☐ S*Y*C*A***
- ☐ **Y**R**E*
- ☒ **Y***A*E*
- ☐ S**S**A*ER

Yes, the answer is correct.

Score: 1

Accepted Answers:
Y*A*E*

2) What is the output of the snippet of code shown below? 1 point

A = [[1, 2, 3],[4, 5, 6],[7, 8, 9]]
print(A[1])

- ☒ [4, 5, 6]
- ☐ [3, 6, 9]
- ☐ [1, 4, 7]
- ☐ [1, 2, 3]

Yes, the answer is correct.

Score: 1

Accepted Answers:
[4, 5, 6]

3) What is the output of the code shown? 1 point

A = [[1, 2, 3],[4, 5, 6],[7, 8, 9]]
print([A[row][1] for row in (0, 1, 2)])

- ☐ [4, 5, 6]
- ☒ [2, 5, 8]
- ☐ [8, 4, 7]
- ☐ [8, 2, 3]

Yes, the answer is correct.

Score: 1

Accepted Answers:
[2, 5, 8]

4) What is the output of the code shown below? 1 point

A = [[1, 2, 3],[4, 5, 6],[7, 8, 9]]
print([A[i][i] for i in range(len(A))])

- ☐ [4, 5, 6]
- ☐ [2, 5, 8]
- ☐ [8, 4, 7]
- ☒ [1, 5, 9]

Yes, the answer is correct.

Score: 1

Accepted Answers:
[1, 5, 9]

5) In "Guess the Movie Name" game, we initially have all blanks (or *). Slowly as the person guesses a letter the question undergoes a change in state (the corresponding letter is opened up). If the movie name is INTERSTELLER, which of the following can never be a state of the question during the run of the program? 1 point

- ☒ I N _ E R _ _ E L L _ R
- ☐ I N T _ R _ T _ L L _ R
- ☐ I N T E R _ T E L L E R
- ☐ I N T E R _ T E _ _ E R

Yes, the answer is correct.

Score: 1

Accepted Answers:
I N _ E R _ _ E L L _ R

6) What is the minimum number of people required to guarantee a collision in their day of birth? 1 point

- ☒ 8
- ☐ 7
- ☐ 6
- ☐ 13

Yes, the answer is correct.

Score: 1

Accepted Answers:
8

7) If there are k symbols in a Dobble game card, how many comparisons are needed at the maximum? 1 point

- ☐ $k/2$
- ☒ k^2
- ☐ k
- ☐ $2k$

Yes, the answer is correct.

Score: 1

Accepted Answers:
 k^2

8) What is the maximum number that can be filled in 5*5 Magic Square? 1 point

- ☐ 9
- ☐ 15
- ☒ 25
- ☐ None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:
25

9) The probability of a birth date collision in a non-leap year is 1 point

- ☒ more than that of leap year
- ☐ less than that of leap year
- ☐ same as that of leap year
- ☐ None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:
more than that of leap year