

Assignment 6

The due date for submitting this assignment has passed.

Due on 2019-09-11, 23:59 IST.

Assignment submitted on 2019-09-11, 22:02 IST

1) What is the output of the following program?

1 point

```
x = "abcdef"
i = "a"
while i in x:
    print(i, end = " ")
```

- ☐ i i i ...infinite times
- ☐ a b c d e f ...infinite times
- ☐ a b c d e f
- ☒ a a a a a...infinite times

Yes, the answer is correct.

Score: 1

Accepted Answers:

a a a a a...infinite times

2) Which of the following arithmetic operators can be used with strings?

1 point

- ☐ ++
- ☐ -
- ☒ +
- ☐ None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

+

3) What is the output of the following code snippet?

1 point

```
line = "What will have so will"
L = line.split('a')
for i in L:
    print(i, end=' ')
```

- ☐ ["What", "will", "have", "so", "will"]
- ☒ Wh t will h ve so will
- ☐ What will have so will
- ☐ ['Wh', 't will h', 've so will']

Yes, the answer is correct.

Score: 1

Accepted Answers:

Wh t will h ve so will

4) Fill in the code to complete the following function for computing factorial:

1 point

```
def factorial(n):
    if n == 0:
        return 1
    else:
        return .....
```

- ☐ factorial(n-1)*n
- ☐ n*(n-1)
- ☐ n*factorial(n-1)
- ☒ Either A or C

Yes, the answer is correct.

Score: 1

Accepted Answers:

Either A or C

5) A palindrome is a word, number, phrase, or other sequence of characters which reads the same backward

0 points

as forward. Fill in the code to complete the following function for checking whether a string is a palindrome.

```
def isPalindrome(s):
    if len(s) != 1:
        return True
    elif s[0] != s[-1]:
        return False
    else:
        return isPalindrome(s.substring(1, len(s) - 1))
```

- ☐ s[0] != s[-1]:
- ☐ s[0] != s[len(s)]:
- ☒ s[1] != s[len(s)-1]:
- ☐ s[1] != s[len(s)]:

No, the answer is incorrect.

Score: 0

Accepted Answers:

s[0] != s[-1]:

6) What is the output of the following recursive function?

1 point

```
def test(i,j):
    if(i==0):
        return j
    else:
        return test(i-1,i+j)
print(test(4,7))
```

- ☒ 17
- ☐ 7
- ☐ 13
- ☐ 10

Yes, the answer is correct.

Score: 1

Accepted Answers:

17

7) What is the game strategy used in the Tic Tac Toe game?

1 point

- ☐ Divide and Conquer
- ☒ Min-Max Strategy
- ☐ Greedy Strategy
- ☐ None of the above

Yes, the answer is correct.

Score: 1

Accepted Answers:

Min-Max Strategy

8) What does the following function do?

1 point

```
def fun(n):
    if (n == 0 or n == 1):
        return n
    if (n%3 != 0):
        return 0
    return fun(n/3)

☐ It returns 1 when n is a multiple of 3, otherwise returns 0
☒ It returns 1 when n is a power of 3, otherwise returns 0
☐ It returns 0 when n is a multiple of 3, otherwise returns 1
☐ It returns 0 when n is a power of 3, otherwise returns 1
```

Yes, the answer is correct.

Score: 1

Accepted Answers:

It returns 1 when n is a power of 3, otherwise returns 0

9) Which of the following statements is correct regarding recursion and iteration?

1 point

- ☐ The code size in case of recursion is smaller than that of iteration
- ☐ The time taken for execution of program in case of recursion is more than that of iteration
- ☐ Iteration is terminated through base case and recursion is terminated when the iterator condition is not satisfied
- ☒ Both A and B

Yes, the answer is correct.

Score: 1

Accepted Answers:

Both A and B

10) If COMPUTER is denoted as KPDITWQC and SCIENCE is denoted as YKHQLKQ, how is SET denoted by this encoding scheme?

1 point

- ☒ YQW
- ☐ RAVP
- ☐ OXS
- ☐ FML

Yes, the answer is correct.

Score: 1

Accepted Answers:

YQW