

Short Quiz #1 (16-Jan): CSC-2259: Discrete Structures, Sp 2020

Your answers must be to the point. Total = 12-3 = 9; marks for each question is shown in [].

LastName:

FirstName

1. Show the syntax-tree of the sentence "This is a poor program". [3]

2. Indicate which of the following codes is the best (most efficient and most logical) by crossing out the others. [1]

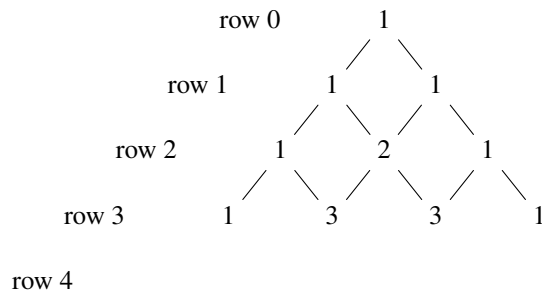
```
max = x;
if (x < y) max = y;
```

```
max = x;
if (x <= y) max = y;
```

```
max = x;
if (max < y) max = y;
```

Give the best code to compute max of x and y . [1]

3. Complete the next row in Pascal's Triangle; include the connecting links. [2]



*** not included *** What is the symmetry property of the numbers $C(n, m)$? [1]

*** not included *** What is the sum of the numbers in row n of Pascal's Triangle? [1]

Give the formula for $C(n, m) = \#(\text{ways of choosing } m \text{ items out of } n \text{ items})$. [1]

Compute the value of $C(18, 15)$. [1]

*** not included *** How many ways you can choose 2 items from 5 items? Express your answer in the form $C(\dots, \dots)$. [1]