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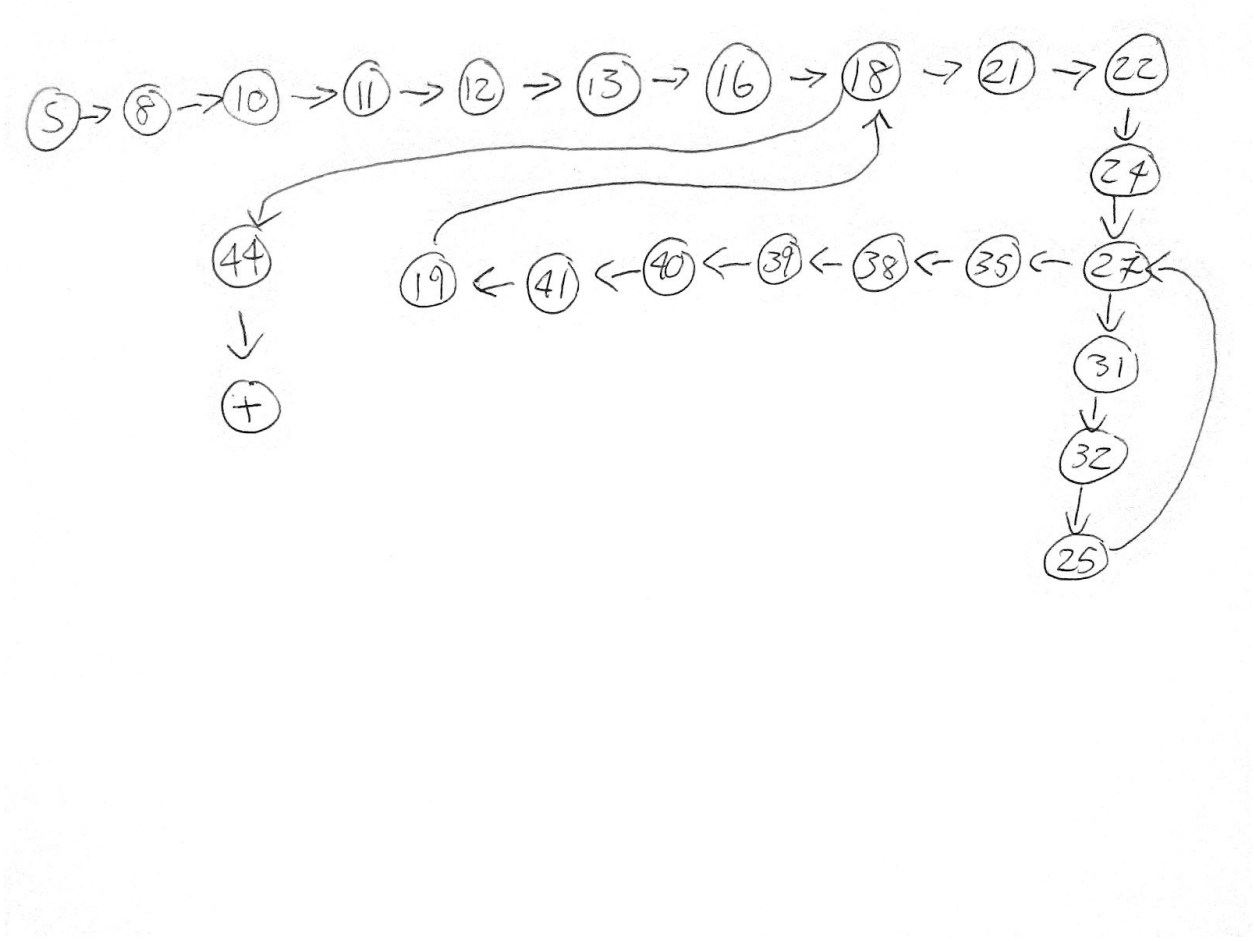
ESOF 322 HW 5
10/31/19

Question 1

Part A



Part B

- T{
  - 8,10,11,12,13,16,18,21,22,24,27,31,32,25,27,35,38,39,40,41,19,18,44
- }

Part C

- T{
  - 8,10,11,12,13,16,18,21,22,24,27,31,32,25,27,35,38,39,40,41,19,18,44
- }

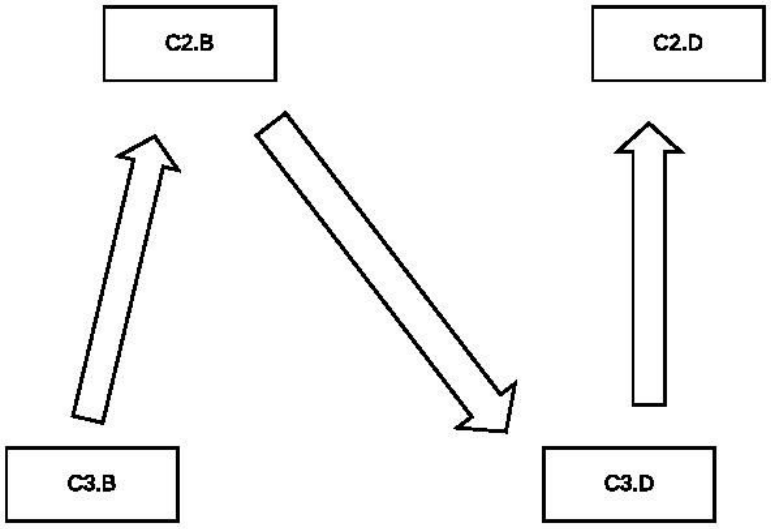
Part D

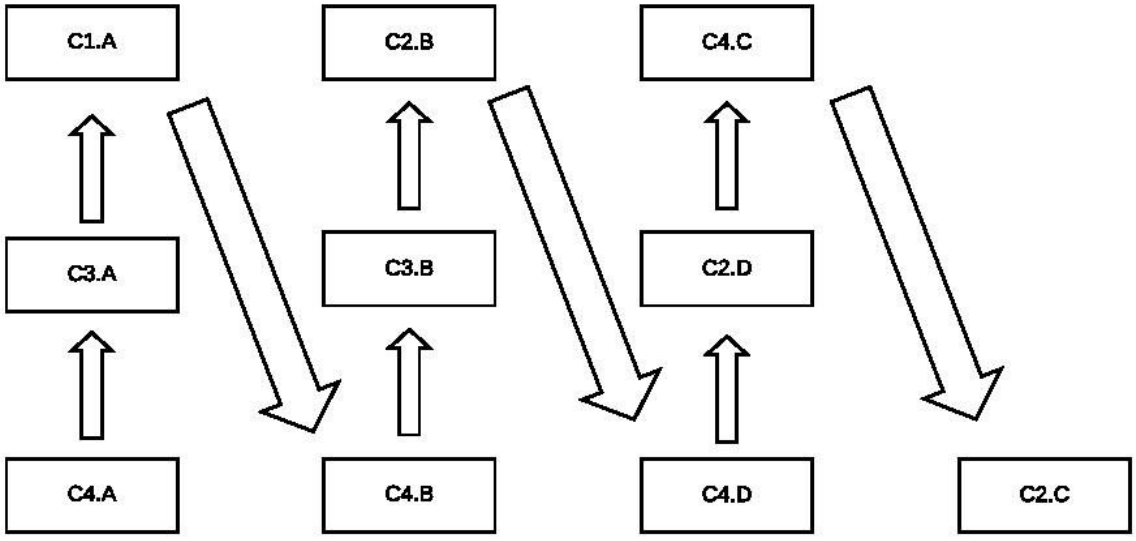
- 100% Node coverage is technically possible, however in general it is not practical as it does not show all potential paths within the code.

- 100% edge coverage is not possible in general, because we would need an infinite data set and infinite amount of time to test with that data set.

Question 2

Part A





Part B

- If we were to call C1.d, we would get an error, as C1 does not contain method d. A call would not exist, as C1 is the top of the hierarchy and thus cannot call the methods of objects lower in the hierarchy.

Question 3

Part A

Test cases that would kill the mutation if(i<1):

- 200, 2, 5, 10, 15, 25, or any number where i is greater than 1(only positive integers)

Part B

Test cases that would kill the mutation if(i==1):

- 200, 10, 15, 5, 32, -1,0, -25, or any number where i is not 1(all integers !=1)

Part C

Test cases that would kill the mutation fib2=fib:

- 0, or any integer value, as it would cause the value to grow by a factor of two, not in a Fibonacci sequence.