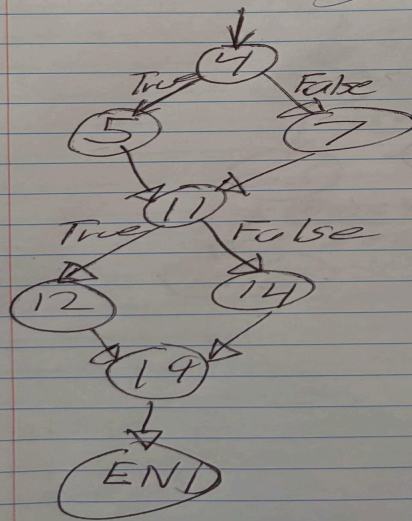


Question 1.1:

percentage\_grade

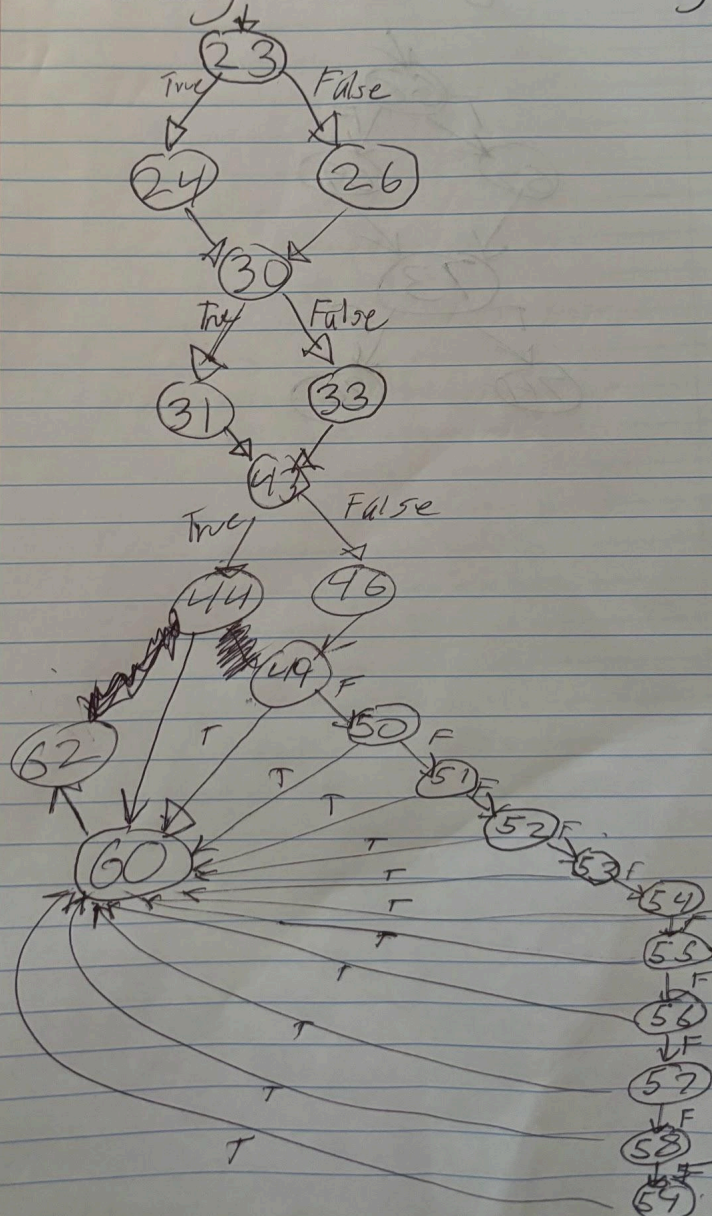
Question 1.1

Percentage - grade



letter\_grade and numeric\_grade (both have the same graph

Question 1.1  
letter\_grade && numeric\_grade



Question 1.2:

percentage\_grade

Test Case	Test Data	Expected	Condition covered	Branches Covered
1	homework = 0 labs = 0 midterm=0 final=0	0.00	4, 5, 11, 12, 19	4-5, 5-11,11-12, 12-19
2	homework = 0.8 labs = 0.8 midterm=0.8 final=0.8	0.8	4,7,11,14,19	4-7, 7-11,11-14, 14-19

letter\_grade and numeric\_grade

Test Case	Test Data	Expected	Condition covered	Branches Covered
3	homework = 0 labs = 0 midterm=0 final=0	EIN	23,24,30,31,43, 44, 60	23-24,24-30,30-31,31-43,43-44, 44-60,60-62
4	homework = 0.9 labs = 0.9 midterm=0.9 final=0.9	A+ or 10	23,26,30,33,43, 46,49,60,62	23-26,26-30,30-33,33-43,43-46, 46-49
5	homework = 0.85 labs = 0.85 midterm=0.85 final=0.85	A or 9	23,26,30,33,43, 46,50,60,62	23-26,26-30,30-33,33-43,43-46, 46-49,49-50
6	homework = 0.80 labs = 0.80 midterm=0.80 final=0.80	A- or 8	23,26,30,33,43, 46,51,60,62	23-26,26-30,30-33,33-43,43-46, 46-49,49-50,50-51
7	homework = 0.75 labs = 0.75 midterm=0.75 final=0.75	B+ or 7	23,26,30,33,43, 46,52,60,62	23-26,26-30,30-33,33-43,43-46, 46-49,49-50,50-51,51-52

8	homework = 0.70 labs = 0.70 midterm=0.70  final=0.70	B or 6	23,26,30,33,43, 46,53,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53
9	homework = 0.65 labs = 0.65 midterm=0.65 final=0.65	C+ or 5	23,26,30,33,43, 46,54,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53, 53-54
10	homework = 0.60 labs = 0.60 midterm=0.60 final=0.60	C or 4	23,26,30,33,43, 46,55,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53, 53-54,54-55
11	homework = 0.55 labs = 0.55 midterm=0.55 final=0.55	D+ or 3	23,26,30,33,43, 46,56,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53, 53-54,54-55,55- 56
12	homework = 0.5 labs = 0.5 midterm=.50 final=0.5	D or 2	23,26,30,33,43, 46,57,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53, 53-54,54-55,55- 56,56-57
13	homework =0.4 labs = 0.4 midterm=0.4 final=0.4	E or 1	23,26,30,33,43, 46,58,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53, 53-54,54-55,55- 56,56-57,57-58
14	homework = 0.35 labs = 0.35 midterm=0.35 final=0.35	F or 0	23,26,30,33,43, 46,59,60,62	23-26,26-30,30- 33,33-43,43-46, 46-49,49-50,50- 51,51-52,52-53, 53-54,54-55,55- 56,56-57,57-58, 58-59

Question 1.4:

100% statement coverage was achieved except for the letter\_grade function where expected "F" was outputted as "EIN".

Question 2.1: see screenshots

Question 2.2: see screenshots

Question 2.3: see screenshots