By submitting this assignment, all team members agree to the following:
"Aggies do not lie, cheat, or steal, or tolerate those who do"
"I have not given or received any unauthorized aid on this assignment"
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Names: Maxine Woods, Katherine Stevens, Michael Tyrrell, Yida Zou
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Activity #1

Variables
Sex (string)
Age (int)
Cholest_total (int)
Cholest_HDL (int)
Smoker (bool)
BP (int)
Meds (bool)
Tot_points (int)
Risk (int)

Steps
Using conditional statements we can add points according to the input
1. Check if sex is male or female
2. Check the age and add points to Tot_points
3. Check Cholest_total and add points to Tot_points
4. Check Cholest_HDL and add points to Tot_points
5. Check smoker/non smoker and add points to Tot_points
6. Check BP and add points to Tot_points
7. Check Meds and add points to Tot_points
8. Look at your Total Points (Tot_points)
9. Based off of your Total Points, estimate your 10-Year Risk % (Risk)

Test Cases
Typical:
1. Inputs: Sex: Male, Age: 60, Smoker: no, Cholest_total: 162, Cholest_HDL: 55, BP: 125, Meds: Y; Output: Age-based score: 12 , 10-year risk: 10%
2. Inputs: Sex: Male, Age: 61, Smoker: no, Cholest_total: 162, Cholest_HDL: 55, BP: 125, Meds: Y; Output: Age-based score: 12, 10-year risk 10%

3. Inputs: Sex: Male, Age: 63, Smoker: no, Cholest_total: 162, Cholest_HDL: 55, BP: 125, Meds: N; Output: Age-based score 11:, 10-year risk 8%
4. Inputs: Sex: Male, Age: 63, Smoker: no, Cholest_total: 163, Cholest_HDL: 55, BP: 125, Meds: Y; Output: Age-based score: 12, 10-year risk 10%
5. Inputs: Sex: Female, Age: 60, Smoker: no, Cholest_total: 162, Cholest_HDL: 55, BP: 125, Meds: N; Output: Age-based score: 12, 10-year risk: 1%
6. Inputs: Sex: Male, Age: 55, Smoker: no, Cholest_total: 162, Cholest_HDL: 57, BP: 127, Meds: N; Output: Age-based score: 10 , 10-year risk: 6%
7. Inputs: Sex: Female, Age: 55, Smoker: no, Cholest_total: 162, Cholest_HDL: 57, BP: 127, Meds: N; Output: Age-based score: 11 , 10-year risk: 1%
8. Inputs: Sex: Female, Age: 75, Smoker: yes, Cholest_total: 182, Cholest_HDL: 57, BP: 127, Meds: Y; Output: Age-based score: 21, 10-year risk: 14%
9. Inputs: Sex: Male, Age: 67, Smoker: yes, Cholest_total: 112, Cholest_HDL: 45, BP: 127, Meds: N; Output: Age-based score: 13, 10-year risk: 12%
10. Inputs: Sex: Female, Age: 75, Smoker: yes, Cholest_total: 182, Cholest_HDL: 53, BP: 127, Meds: Y; Output: Age-based score: 21, 10-year risk: 14%
11. Inputs: Sex: Male, Age: 41, Smoker: no, Cholest_total: 222, Cholest_HDL: 57, BP: 127, Meds: Y; Output: Age-based score: 5, 10-year risk: 2%
12. Inputs: Sex: Female, Age: 35, Smoker: no, Cholest_total: 162, Cholest_HDL: 47, BP: 127, Meds: Y; Output: Age-based score: <9, 10-year risk: <1%
13. Inputs: Sex: Female, Age: 45, Smoker: yes, Cholest_total: 182, Cholest_HDL: 57, BP: 127, Meds: Y; Output: Age-based score: 16, 10-year risk: 4%
14. Inputs: Sex: Male, Age: 25, Smoker: yes, Cholest_total: 211, Cholest_HDL: 49, BP: 127, Meds: Y; Output: Age-based score: 16, 10-year risk: 4%
15. Inputs: Sex: Female, Age: 55, Smoker: yes, Cholest_total: 179, Cholest_HDL: 57, BP: 127, Meds: N; Output: Age-based score: 15, 10-year risk: 3%
16. Inputs: Sex: Female, Age: 67, Smoker: yes, Cholest_total: 182, Cholest_HDL: 57, BP: 127, Meds: N; Output: Age-based score: 16, 10-year risk: 4%
17. Inputs: Sex: Male, Age: 33, Smoker: yes, Cholest_total: 200, Cholest_HDL: 57, BP: 137, Meds: Y; Output: Age-based score: 8, 10-year risk: 4%
18. Inputs: Sex: Female, Age: 64, Smoker: no, Cholest_total: 202, Cholest_HDL: 45, BP: 260, Meds: N; Output: Age-based score: 17, 10-year risk: 5%
19. Inputs: Sex: Female, Age: 75, Smoker: yes, Cholest_total: 182, Cholest_HDL: 57, BP: 135, Meds: N; Output: Age-based score: 20, 10-year risk: 11%
20. Inputs: Sex: Male, Age: 43, Smoker: no, Cholest_total: 252, Cholest_HDL: 58, BP: 132, Meds: Y; Output: Age-based score: 8, 10-year risk: 4%

Edge:
1. Inputs: Sex: Female, Age: 20, Smoker: no, Cholest_total: 999, Cholest_HDL: 47, BP: 121 Meds: N; Output: Age-based score: 8 , 10-year risk: <1%
2. Inputs: Sex: Female, Age: 79, Smoker: yes, Cholest_total: 0, Cholest_HDL: 58, BP: 121, Meds: N; Output: Age-based score: 18 , 10-year risk: 6%

3. Inputs: Sex: Female, Age: 21, Smoker: yes, Cholest_total: 160, Cholest_HDL: 42, BP: 131, Meds: Y; Output: Age-based score: 11 , 10-year risk: 1%
4. Inputs: Sex: Female, Age: 22, Smoker: no, Cholest_total: 241, Cholest_HDL: 0, BP: 122, Meds: Y; Output: Age-based score: 10, 10-year risk: 1%
5. Inputs: Sex: Female, Age: 23, Smoker: no, Cholest_total: 198, Cholest_HDL: 40, BP: 0, Meds: Y; Output: Age-based score: 2 , 10-year risk: <1%
6. Inputs: Sex: Female, Age: 43, Smoker: yes, Cholest_total: 213, Cholest_HDL: 46, BP: 300 Meds: Y; Output: Age-based score: 20 , 10-year risk: 11%
7. Inputs: Sex: Female, Age: 44, Smoker: no, Cholest_total: 211, Cholest_HDL: 0, BP: 132 Meds: N; Output: Age-based score: 12, 10-year risk: 1%
8. Inputs: Sex: Female, Age: 45, Smoker: no, Cholest_total: 244, Cholest_HDL: 100, BP: 134 Meds: Y; Output: Age-based score:13 , 10-year risk: 2%
9. Inputs: Sex: Female, Age: 46, Smoker: no, Cholest_total: 280, Cholest_HDL: 80, BP: 158 Meds: N; Output: Age-based score: 15 , 10-year risk: 3%
10. Inputs: Sex: Female, Age: 78, Smoker: yes, Cholest_total: 160, Cholest_HDL: 40, BP: 120 Meds: Y; Output: Age-based score: 22 , 10-year risk: 17%
11. Inputs: Sex: Male, Age: 20, Smoker: no, Cholest_total: 211, Cholest_HDL: 42, BP: 999 Meds: N; Output: Age-based score:0 , 10-year risk: 1%
12. Inputs: Sex: Male, Age: 21, Smoker: no, Cholest_total: 212, Cholest_HDL: 58, BP: 10 Meds: Y; Output: Age-based score: <0, 10-year risk: <1%
13. Inputs: Sex: Male, Age: 22, Smoker: yes, Cholest_total: 213, Cholest_HDL: 0, BP: 137 Meds: Y; Output: Age-based score: 12, 10-year risk: 6%
14. Inputs: Sex: Male, Age: 23, Smoker: no, Cholest_total: 214, Cholest_HDL: 1, BP: 158 Meds: N; Output: Age-based score: 4, 10-year risk: 1%
15. Inputs: Sex: Male, Age: 24, Smoker: no, Cholest_total: 215, Cholest_HDL: 200, BP: 146 Meds: Y; Output: Age-based score: <0, yes-year risk: <1%
16. Inputs: Sex: Male, Age: 25, Smoker: no, Cholest_total: 216, Cholest_HDL: 999, BP: 140 Meds: N; Output: Age-based score: <0, 10-year risk: <1%
17. Inputs: Sex: Male, Age: 26, Smoker: no, Cholest_total: 217, Cholest_HDL: 41, BP: 139 Meds: Y; Output: Age-based score: 2, yes-year risk: 1%
18. Inputs: Sex: Male, Age: 27, Smoker: no, Cholest_total: 218, Cholest_HDL: 50, BP: 134 Meds: N; Output: Age-based score:<0 , yes-year risk: <1%
19. Inputs: Sex: Male, Age: 28, Smoker: no, Cholest_total: 219, Cholest_HDL: 48, BP: 159 Meds: N; Output: Age-based score: 3, 10-year risk: 1%
20. Inputs: Sex: Male, Age: 29, Smoker: no, Cholest_total: 220, Cholest_HDL: 20 , BP: 125 Meds: Y; Output: Age-based score: 1, 10-year risk: 1%