

C++ LAB 7 PROJECT

C++ Lab: Selection structure via the IF statement

User Requirements

Create a command line program that correctly displays the overall grade of a student based on five quiz score. You must also ask the student what the highest score possible for each quiz (i.e., don't assume that all the quizzes are worth exactly 100 points). Another criterion for determining the weight of each quiz is based on age. Use the table below to determine the appropriate weight of each quiz.

Max Quiz Value	Student Age	Quiz Weight
Quiz 1: 200 points	< 18	.20
Quiz 1: 200 points	>= 18	.25
Quiz 2: 150 points	< 18	.15
Quiz 2: 150 points	>= 18	.30
Quiz 3: 275 points	< 18	.25
Quiz 3: 275 points	>= 18	.35
Quiz 4: 175 points	< 18	.10
Quiz 4: 175 points	>= 18	.05
Quiz 5: 225 points	< 18	.30
Quiz 5: 225 points	>= 18	.05

```
Enter the age of the student: 17
Enter the score for quiz 1: 175
Enter the score for quiz 2: 125
Enter the score for quiz 3: 225
Enter the score for quiz 4: 125
Enter the score for quiz 5: 200
```

```
Overall percent: 84.4%
Letter grade: B
```

```
Enter the age of the student: 18
Enter the score for quiz 1: 175
Enter the score for quiz 2: 125
Enter the score for quiz 3: 225
Enter the score for quiz 4: 125
Enter the score for quiz 5: 200
```

```
Overall percent: 83.4%
Letter grade: B
```

Software Requirements

Your program must declare the following real number variables.

- quiz1, quiz2, quiz3, quiz4, quiz5, percent, sumOfStuWeightedQuizScores=0, sumOfMaxWeightedQuizScores=0
- quiz1Weight, quiz2Weight, quiz3Weight, quiz4Weight, quiz5Weight

Your program must declare the following string variable

- letterGrade

Your program must declare the following whole number variable

- age, quiz1MaxScore=200, quiz2MaxScore=150, quiz3MaxScore=275, quiz4MaxScore=175, quiz5MaxScore=225

You must use the IF statement and show only one digit after the decimal point for the overall percent.