Your key underlying principle(s)

The five attributes we selected as a team were:

Attendance

- Actual attendance at meetings, Punctuality & Responsiveness
- (**Marking:** showing up on time and responding promptly is 5 marks. 3 marks can mean showing up for most of the meeting and responding to the message sent to this person. The idea here is that responsiveness and punctuality can counterbalance one another if one is not fully met)

Collaboration

- Volunteering to do work/help others if needed & to communicating openly with team members
- Showing leadership by leading the group to where they need to go
- (**Marking**: does this person make you feel like working in a team? Leadership can also be considered in this section; a proper leader may help save you time when making decisions. If a teammate only gets the job done independently for the team, it's working FOR a team but not AS a team technically, this is still a collaboration, but there's no chemistry for the collaboration, so chemistry makes the solid average in the extraordinary)

Contribution

- Hardworking (doesn't have to do the biggest part of the project but is willing to do parts that they might find more difficult)
- (**Marking:** 5 marks here can be this person may make a sacrifice herself/himself to take what is difficult for everybody and finish with an answer that will satisfy you (if you can speak of the team), the amount of work should be considered but not the dominant factor in this section, again the workload and difficulty can counterbalance if one is not met)

Attentive/Supportive

- Mental attendance to meetings and others (engaged)
- Communicates politely as well as being open to other people's ideas, thoughts, and feedback
- Empathetic to others' situations while still being fair
- (**Marking**: 5 marks mean this person has shared her/his opinion or given constructive feedback to teammates' work or ideas, and any of these actually brought progress to the group work. Meanwhile, this person has shown a sense of empathy and politeness. And for the person who is getting constructive criticism, it is not to be translated as an offence like Bennet.)

Organized/planning

- Doesn't procrastinate their work & able to show that they can adapt to certain situations
- (**Marking**: 5 marks can mean this person can get the job done ahead of schedule to increase the fault tolerance for the team or to smoothen the teamwork pace, 3 means this person does everything under schedule, simply didn't drag the team down)

Reproducible technical description (e.g., equation or algorithm)

FS: final score **GS:** group score m: individual score **k:** the parameter used for amplifying (scaling)

$FS = GS \times k\,(0 \le FS \le 100)$

$$k = f(m) = \begin{cases} 1.1 & \text{if } 4.5 \le m \le 5 \\ 1.05 & \text{if } 4 \le m < 4.5 \\ 1 & \text{if } 3.5 \le m < 4 \\ 0.9 & \text{if } 3 \le m < 3.5 \\ 0.8 & \text{if } 2.5 \le m < 3 \\ 0.6 & \text{if } 2 \le m < 2.5 \\ 0.4 & \text{if } 1.5 \le m < 2 \\ 0.1 & \text{if } m < 1.5 \end{cases}$$

(**Equation info:** The value k depends on the individual score being m, which we can envision with the presented function. In summary, the higher the grade of m (individual score), the higher the value of k(scaling), meaning this can either amplify a student's grade or decrease it depending on the scaling that said student has given.

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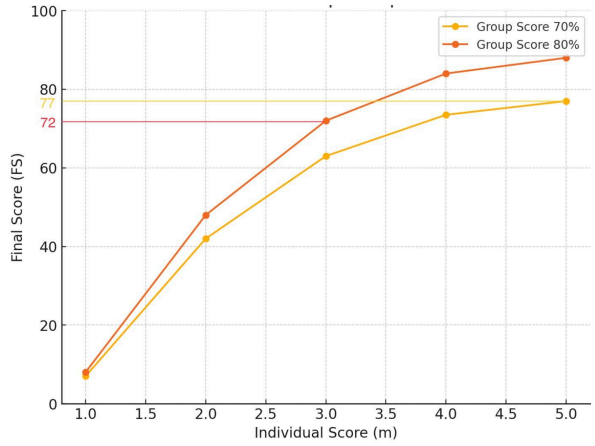
A graphic to aid the description



Output from your R function when applied to the five scenarios. Feel free to include other examples if they help demonstrate your solution's underlying principles or strengths/weaknesses.

S1 group score of 70%; Individual scores of 3, 3, 3, 3, 3. **S2** group score of 70%; Individual scores of 5, 5, 5, 5, 5 **S3** group score of 80%; Individual scores of 3, 3, 3, 3, 3, **S4** group score of 70%; individual scores of 1, 2, 3, 4, 5, **S5** group score of 90%; individual scores of 1, 4, 4, 5

S1: 63, 63, 63, 63, 63. **S2:** 77, 77, 77, 77, 77. **S3:** 72, 72, 72, 72, 72. **S4:** 7, 42, 63, 73.5, 77.

S5: 9, 94.5, 94.5, 99

Reflect on aspects you like and don't like about your solution.

Weakness

- Rating/Judging someone can have weaknesses as people tend to view others differently based on their worth. For example, Student A and Student B worked with one another in week 1, meaning they had already formed a relationship before the week 2 group was formed therefore, views and bases may not be fair when rating one another compared to others.
- Due to the parameter of each interval being piecewise but not following a specific order, the grading goes harsher as the individual goes lower. This might be unfair for people rated slightly lower than three.
- If we compare scenarios 2 and 3, people with better group scores actually have lower final scores because of the peer rating, which will be problematic. This is because we scale up the grade for people who received peer ratings above 4, indicating we highly value peer ratings.

Strengths

- The intervals allow for wiping out the slight differences between individual scores. (For example, 5 and 4.9 are quite similar scores. Like our GPA grading system and first-in-course awards, we allow certain gaps to count for individual bias and tiny mistakes that do not reflect performance. Furthermore, people who get high ratings from the peer review can be rewarded.
- Our function allows people with extremely low peer ratings to have a final score close to 0, regardless of the group score.
- Strength (of the code): our code allows inputting the grade only once by loading the Rdata file, saving time for finding and typing the grade manually.