1. “Mr. Kim Young-min is a 31-year-old single young man with a very outgoing personality. He majored in philosophy while attending university and was actively involved in various student activities. He is very interested in social issues and goes to rural areas for volunteer work every summer vacation "

Please rank the following statements about Mr. Kim Young-min in order of likelihood:

(1) Mr. Kim Young-min works for a loan shark company.

(2) Mr. Kim Young-min supports environmental activism.

(3) Mr. Kim Young-min works for a loan shark company and supports environmental activism.

1. A certain town is served by two hospitals. In the larger hospital about 45 babies are born each day, and in the smaller hospital about 15 babies are born each day. As you know, about 50 percent of all babies are boys. However, the exact percentage varies from day to day. Sometimes it may be higher than 50 percent, sometimes lower. For a period of year, each hospital recorded the days on which more than 60 percent of the babies born were boys. Which hospital do you think recorded more such days?

(1) The larger hospital

(2) The smaller hospital

(3) About the same (that is, within 5 percent of each other)

1. Imagine an urn filled with balls, of which ⅔ are of one color and ⅓ of another. One individual has drawn 5 balls from the urn, and found that 4 were red and 1 was white. Another individual has drawn 20 balls and found that 12 were red and 8 were white. Which of the two individuals should feel more confident that the urn contains ⅔ red balls and ⅓ white balls, rather than the opposite?
2. Imagine you flip a fair coin six times. You get the following sequence: Heads - Tails - Heads - Tails - Tails - Heads. Do you think this sequence is more likely, less likely, or just as likely to occur as a sequence like H-H-H-T-T-T or HHHHTH?
3. This sequence seems more likely because it has both heads and tails.
4. This sequence seems less likely because it has too many changes between heads and tails.
5. This sequence is just as likely as any other sequence of six coin flips.
6. Imagine rolling a die ten times. You get all even numbers. What can you expect about the next roll?
7. The next roll is more likely to be an odd number to "balance out" the previous results.
8. The next roll is completely independent of the previous rolls and each number remains equally likely.
9. The die is probably defective and needs to be replaced.
10. You've used up all your luck on even numbers, so an odd number is guaranteed next.
11. If you were at a casino and saw a roulette wheel land on red five times in a row, how would you bet next?
12. I would bet on black, expecting a change
13. I would bet on red, expecting the streak to continue
14. I would bet randomly, not considering the previous outcomes
15. **Scenario 1**: A flipped a coin 10 times and observed the following results:

* Heads: 8 times, Tails: 2 times

Based on this result, A concluded that the coin is biased towards heads.

**Scenario 2:** B flipped the same coin 1,000 times and observed the following result

* Heads: 520 times, Tails: 480 times

Based on this result, B concluded that the coin is fair.

What do you think about Scenario 1?

1. I think A's conclusion is correct.
2. I think A's conclusion is incorrect.
3. I'm not sure.

What do you think about Scenario 2?

1. I think B's conclusion is correct.
2. I think B's conclusion is incorrect.
3. I'm not sure.
4. Imagine you are a school administrator tasked with evaluating potential new teachers. You are provided with short written descriptions of practice lessons conducted by two student teachers:

* **Teacher A:** The description highlights a very well-structured and engaging lesson that impressed the observers.
* **Teacher B:** The description details a lesson with some good elements but also areas for improvement.

**Questions:**

1. **Lesson Quality**: On a scale of 1 (Very Poor) to 10 (Excellent), how would you rate the quality of Teacher A's practice lesson?
2. **Future Success**: Using the same scale (1-10), how successful do you predict Teacher A will be as a teacher in 5 years?
3. **Lesson Quality**: On the same scale (1-10) how would you rate the quality of Teacher B's practice lesson?
4. **Future Success**: Using the same scale (1-10), how successful do you predict Teacher B's will be as a teacher in 5 years?
5. Imagine you're considering investing in a company called "TechStar." You've read some news articles about TechStar - they've recently developed a revolutionary new product that's getting a lot of positive buzz.

A friend tells you they've been following TechStar's stock price for a while. They mention the price has been steadily increasing over the past few months.

**Question:**

Based on the information you have, how likely do you think the stock price of TechStar will continue to increase in the next year? (Please choose one answer)

1. Definitely will increase (almost guaranteed)
2. Likely to increase (higher than 50% chance)
3. Unsure, could go either way (around 50% chance)
4. Less likely to increase (around 26-49% chance)
5. Definitely will decrease (almost guaranteed)
6. I’m not sure
7. Imagine you are an advisor at a university and need to advise two new students on their upcoming academic year. You have access to their first-year grade reports:

* **Student A:** All B grades in their first year.
* **Student B:** A mix of A's, B's, and C's in their first year.

**Questions:**

1. **Confidence Level**: How confident are you in predicting Student A's final grade point average (GPA) for the year? (Scale: 1 = Not confident at all, 5 = Very confident)
2. **Confidence Level**: How confident are you in predicting Student B's final grade point average (GPA) for the year? (Scale: 1 = Not confident at all, 5 = Very confident)
3. In your experience, do you find yourself more confident in making predictions about future outcomes when the input variables are highly redundant or correlated, even if you are aware that redundancy among inputs may decrease accuracy?
4. Yes, I tend to be more confident in predictions based on redundant or correlated input variables.
5. No, I prioritize accuracy over confidenceand consider the independence of input variables in making predictions.
6. Imagine a group of students taking two similar math tests. We select the 10 students who scored the highest on the first test. What can we expect about their scores on the second test, on average?
7. They will likely score even higher on the second test.
8. They will likely score about the same on the second test.
9. Their scores on the second test will likely be lower, but still above average.
10. Their scores on the second test could be anything, there's no predictable pattern.