**Optum Interview Questions\_M & R Extension**

**Interviewer Name:** Phani Singaraju, Alisheem Khan

1. Explain Machine learning project in brief. Which model you used and what is your approach?
2. How you decide model and what are the evaluation matrix used to evaluate model?
3. What is F1 score and its formula?
4. Why use harmonic means in F1 score, what is the idea behind this?
5. What is precision and recall?
6. Explain assumptions of Linear Regression model.
7. Explain Homoscedasticity in detail.
8. What is the strategy to create chat boat in healthcare domain.
9. Explain NLP project in detail.
10. What is a curse of dimensionality?
11. Explain dimension reduction?
12. Explain PCA technique.
13. What is AdaBoost and explain its working.
14. Explain Gradient decent optimization technique.
15. What are local minima and global minima.
16. What happened if we increase learning rate?
17. Write a SQL query to find top 3 salary for all the departments.
18. Python Code: Input – ‘aabbbccadbdd’ Output – ‘a2b3c2a1d1b1d2’
19. How to remove duplicates from below row by using pandas.

Input: Index col1

1 AA BB AA BB AA

2 CC CC CC

Output: Index col1

1 AA BB

2 CC

1. Explain Inheritance with its types.