IX KCE Round I

Duration : 4 Hours (10.00 a.m to 02.00 PM)

Instructions :

- Candidate can choose any programming languages that he/she prefer
- All 3 programs should be in same language
- Interviewer will review the code and verify the output for the completed programs.
- Avoid using predefined functions
- Program should be well commented
- Users should provide the inputs for all the program, avoid hardcoding the inputs.
- Once completed commit into github or upload into Google Drive and share the link with us.
- Ensure your files are uploaded before 2'O clock.

For clarification please reach out to Senthil Murugan, HR Manager . Mobile : 99527 25745

1. To create a chat like environment, and can keep a character/word to end the chat. At the end of the chat, the application should be able to answer 3 types of questions.
   Eg.
   A : Ping
   B : Pong
   A : Ping
   B : quit
   Here, quit is the key to end the conversation. After that, 3 questions to popup / analysis report answering all 3 qns below
   1. To know the number of repetition of a character
   2. To know the number of repetition of a word
   3. To know the length of conversation
   Appropriate answers need to be displayed on choosing

2. Find the logic and replicate it .
   2 -> 8
   3 -> 36
   4 -> 272

   Sample Output (Need to get input from the user)

   Enter the number : 2
   Output : 8

   Enter the number : 3
   Output : 36

   Enter the number : 5
   Output : ?

3. Design an algorithm which helps a man to travel from A-D with minimum cost and time. Given route points (consider travel by bus for example). below are the route points the country supports

   A - B (Cost 50, KM - 100)
   B - C (Cost 100, KM - 50)
   A - C (Cost 75 , KM- 150)
   C - D (Cost 50 , KM - 100)
   A - D (Cost 150, KM-150)

****** ALL THE BEST !!! **********