

# CSE421 Lab 3

## Home Work

1. Create a basic client-server program where the client informs the server of the client's IP and device name whenever a client is connected and the server prints that.
2. Create a basic client-server program where the server receives a message from the client and counts how many vowels are there in the message. If there are no vowels in the message then the server sends "Not enough vowels" message to the client, if there are at most two vowels then the server sends "Enough vowels I guess" and if there are more than two vowels then the server sends "Too many vowels" to the client.
3. Create a basic multi-threaded client server program where the server receives a message from the client and counts how many vowels are there in the message. If there are no vowels in the message then the server sends "Not enough vowels" message to the client, if there are at most two vowels then the server sends "Enough vowels I guess" and if there are more than two vowels then the server sends "Too many vowels" to the client. Only difference here is that the server will be able to respond to multiple clients simultaneously.
4. Create a basic client-server program where the server takes the number of hours a person worked from the client and calculates the person's salary.
  - If the hours worked is less than or equal to 40, then the person receives Tk 200 per hour.
  - If the hours worked is greater than 40, then the person receives Tk 8000 plus Tk 300 for each hour worked over 40 hours.

The client will provide how many hours the person worked to the server and the server will calculate the salary and send it to the client.