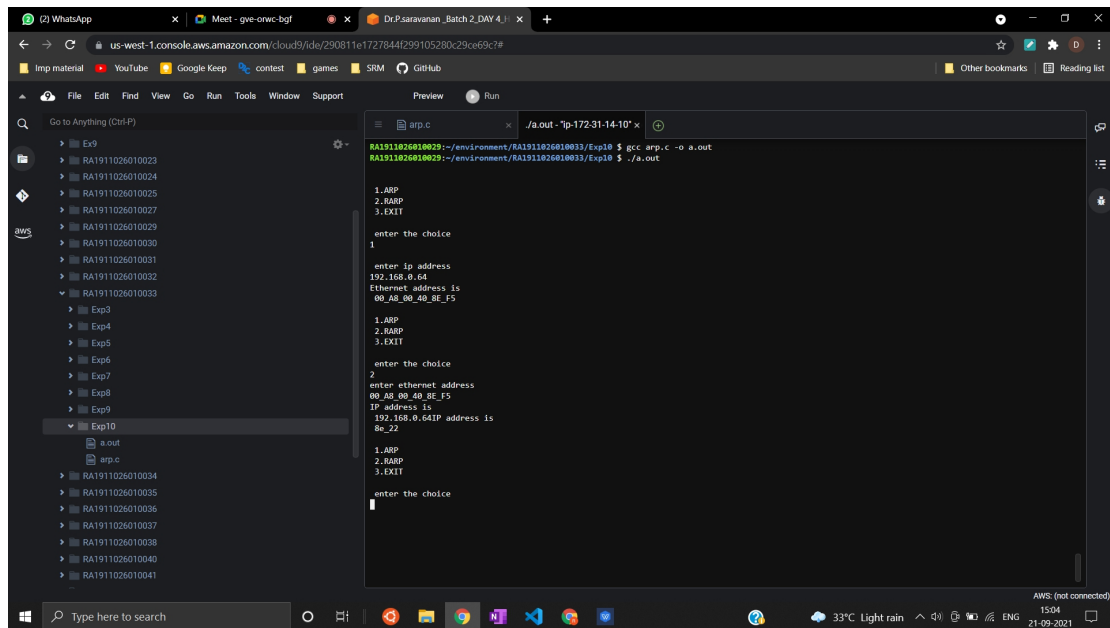


Exercise : 10  
ARP IMPLEMENTATION USING UDP

Code :

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
int main()
{
    char ip[10][20] = {"192.168.0.64", "192.168.0.60", "192.168.0.68", "132.147.3.3"};
    char et[10][20] = {"00_A8_00_40_8E_F5", "00_16_17_31_8e_22", "00_16_17_31_8E_F7", "00_16_1_7_31_8E_08"};
    char ipaddr[20], etaddr[20];
    int i, op;
    int x = 0, y = 0;
    while (1)
    {
        printf("\n\n 1.ARP \n 2.RARP \n 3.EXIT\n");
        printf("\n enter the choice \n");
        scanf("%d", &op);
        switch (op)
        {
            case 1:
                printf("\n enter ip address\n");
                scanf("%s", ipaddr);
                for (i = 0; i <= 20; i++)
                {
                    if (strcmp(ipaddr, ip[i]) == 0)
                    {
                        printf("Ethernet address is \n %s", et[i]);
                        x = 1;
                    }
                }
                if (x == 0)
                    printf("invalid ip address \n");
                x = 0;
                break;
            case 2:
                printf("enter ethernet address \n");
                scanf("%s", etaddr);
                for (i = 0; i <= 20; i++)
                {
                    if (strcmp(etaddr, et[i]) == 0)
                    {
                        printf("IP address is \n %s", ip[i]);
                        y = 1;
                    }
                }
                if (y == 0)
                    printf("Invalid ethernet address \n");
                y = 0;
                break;
            case 3:
                exit(0);
        }
    }
}
```

Output:



```
us-west-1.console.aws.amazon.com/cloud9/ide/290811e1727844f299105280c29ce69c7#

File Edit Find View Go Run Tools Window Support Preview Run

Go to Anything (Ctrl-F)

Ex9
RA1911026010023
RA1911026010024
RA1911026010025
RA1911026010027
RA1911026010029
RA1911026010030
RA1911026010031
RA1911026010032
RA1911026010033
Exp3
Exp4
Exp5
Exp6
Exp7
Exp8
Exp9
Exp10
a.out
arp.c
RA1911026010034
RA1911026010035
RA1911026010036
RA1911026010037
RA1911026010038
RA1911026010040
RA1911026010041

ARP: (not connected)

1904
21-09-2021
```