

Question 1

```
#include<stdio.h>

int main(void)
{
    char type, pType,repeat;

    float total,discount = 0,amount;

    int rooms,nights;

    while(repeat != 'N' && repeat != 'n')
    {
        printf("Enter Room type: ");
        scanf("%c%c", &type);
        printf("No of rooms: ");
        scanf("%d%c", &rooms);
        printf("No of nights: ");
        scanf("%d%c", &nights);
        printf("Enter payment method: ");
        scanf("%c%c", &pType);

        if(type == 'D')
        {
            amount = 31000.00 * rooms * nights;
        }
        else if(type == 'S')
        {
            amount = 35000.00 * rooms * nights;
        }
        else if(type == 'C')
```

```

    {
        amount = 50000.00 * rooms * nights;
    }
    else if(type == 'E')
    {
        amount = 75000.00 * rooms * nights;
    }
    else if(type == 'P')
    {
        amount = 100000.00 * rooms * nights;
    }
    else
    {
        printf("Invalid room type.\n");
        printf("Do you want to continue: ");
        scanf("%c%c", &repeat);
        continue;
    }
    if(pType == 'C')
    {
        discount = amount * 10 / 100.0;
    }

    printf("Total : %.2f\n", total = amount - discount);
    puts("");
    printf("Do you want to continue: ");
    scanf("%c%c", &repeat);
}

return 0;

```

```
}
```

Question 2

```
#include<stdio.h>
```

```
int main(void)
```

```
{
```

```
    int i,j,x=1,y=1,maxNo,minNo;
```

```
    float elec[4][7],max,min,total,avg;
```

```
    //Collecting data
```

```
    for(i =0 ;i<4; i++)
```

```
    {
```

```
        printf("Week %d\n", i+1);
```

```
        for(j = 0;j<7;j++)
```

```
        {
```

```
            printf("Day %d: ", j+1);
```

```
            scanf("%f", &elec[i][j]);
```

```
        }
```

```
        puts("");
```

```
    }
```

```
    //Finding maximum
```

```
    max = elec[0][0];
```

```
    for(i =0 ;i<4; i++)
```

```
    {
```

```
        for(j = 0; j<7 ; j++)
```

```
        {
```

```
            if(max < elec[i][j])
```

```
            {
```

```

        max = elec[i][j];
        maxNo = x;
    }
    x++;
}

}

//Finding minimum
min = elec[0][0];
for(i =0 ;i<4; i++)
{
    for(j = 0; j<7 ; j++)
    {
        if(min > elec[i][j])
        {
            min = elec[i][j];
            minNo = y;
        }
        y++;
    }
}

//Finding total and average
for(i =0 ;i<4; i++)
{
    for(j = 0; j<7 ; j++)
    {
        total = total + elec[i][j];
    }
}

avg = total / 28.0;

```

```

//Displaying data
printf("Day of the Month with maximum usage: %d\n", maxNo);
printf("Maximum Usage in units: %.2f\n", max);
printf("Day of the Month with minimum usage: %d\n", minNo);
printf("Minimum Usage in units: %.2f\n", min);
printf("Average usage for the Month: %.2f\n", avg);
printf("Total usage for the Month: %.2f\n", total);

return 0;
}

```

Question 3

```

#include<stdio.h>

int main(void)
{
    FILE * fpt;
    int num,i,num1;
    float local,inter,roam,total,l,r,o;

    fpt = fopen("charges.txt","w");
    if(fpt == NULL)
    {
        printf("File cannot be created\n");
        return -1;
    }

    for(i =0; i<5; i++)
    {

```

```

    printf("Number: ");
    scanf("%d", &num);
    printf("local call charges: ");
    scanf("%f", &local);

    printf("international call charges: ");
    scanf("%f", &inter);

    printf("roaming charges: ");
    scanf("%f", &roam);

    fprintf(fpt,"%d\t %.2f\t %.2f\t %.2f\n", num,local,inter,roam);

    puts("");
}
fclose(fpt);

fpt = fopen("charges.txt","r");
if(fpt == NULL)
{
    printf("File cannot be found\n");
    return -1;
}
printf("Number\t    Charges\n");
for(i = 0; i<5; i++)
{
    fscanf(fpt,"%d %f %f %f", &num1, &l, &o, &r);
    printf("%d\t %.2f\n", num1, total = l+o+r);
}

```

```
fclose(fpt);
```

```
return 0;
```

```
}
```