Logic Building Assignment : 20

1. Design application for hotel. According to the management team of hotel they are giving discount on total bill amount of customer.
If bill bill amount is less than 500 then there is no discount , if bill amount is less than 1500 and more than 500 they give 10% discount.
And if the bill amount is more than 1500 then they give 15% discount.
Our application should accept total bill amount and depends on the discount policy we have to return the amount after applying discount.

Input : 1200 Output : 1080
Input : 290 Output : 290
Input : 3700 Output : 3145

Function prototype :

```
float CalculateBill(int iAmount)
{
    // Logic
}
```

2. Design application for income tax department to calculate tax amount. According to the income tax department there is no income tax for the income less than 5 lakhs.
If income is in between 5 to 10 lakhs then there will be 10% tax.
If income is in between 10 to 20 lakhs then there will be 20% tax.
And for more than 20 lakhs there will be 30% tax.
We have to accept gross income from user and return the tax amount.

Input : 600000 Output : 10000 (0 + 10000)
Input : 450000 Output : 0
Input : 1200000 Output : 90000 (0 + 50000 + 40000)

Function prototype :

```
float IncomeTax(int iAmount)
{
    // Logic
}
```

3. Design application for school management system.
As school is primary there are 4 standards from 1 to 4.
School fees of each standard is different.
For first standard fees are 8900, for second standard 12790, for third standard 21000 and for fourth standard fees are 23450.
We have to accept standard from user and display the corresponding fees.

Input : 2 Output : 12790
Input : 4 Output : 23450
Input : 6 Output : Wrong input

Function prototype :

```
int SchoolFees(int iStandard)
{
    // Logic
}
```

4. We have to design application for tourist company.
Tourist company provides cars on rent.
Depends on the running of car they apply rent.

If running is less than 100 kilometres then they charge 25 rupees per kilometre .
And if running is more than 100 kilometres then they apply 15 rupees per kilometre after 100 kilometres.
We have to accept number of kilometres from user and return the estimated rent.

Input : 73 Output : 1825
Input : 132 Output : 2980
Input : 189 Output : 3835

Function prototype :

```
int TouristBill(int iKilometer)
{
    // Logic
}
```