Question -1

`1. Medical Insurance Eligibility Checker`
`Scenario:`
A hospital wants to check
if a `patient qualifies
for insurance coverage` based on these conditions:

- Age `between 18 and 60`
- No `pre-existing health condition` (yes/no)
- Monthly salary `≥ ₹25,000`

Write a program using a `function`
to check if a patient is eligible
for `medical insurance`.

```c
#include <stdio.h>

void insurance()
{
    int sal, age, cond;

    printf("Enter the age of patient:\n");
    scanf("%d", &age);
    printf("Enter the salary of patient:\n");
    scanf("%d", &sal);
    printf("Does patient have any medical condition?:\n");
    scanf("%d", &cond);

    if ((sal >= 25000 && age <18 && age >60) || cond == 1)
    {
        printf("Not Eligible for insurance\n");
    }
    else
    {
        printf("Eligible\n");
    }
}

int main()
{
    insurance();
```

```
    return 0;
}
```

Enter the age of patient:
23
Enter the salary of patient:
45000
Does patient have any medical condition?:
0
eligible

Question -2

Toll Tax Calculation Using Switch Case

`Scenario:`
A toll plaza charges different amounts
based on the vehicle type:

- `Car`
- ₹50
- `Truck`
- ₹100
- `Bike`
- ₹20
- `Bus`
- ₹80

Write a program using a `switch case`
to calculate the total `toll tax for N vehicles`.

```c
#include <stdio.h>

int main() {
    int ch, i, tot = 0, n;

    printf("TOLL TAX PROGRAM\n");
    printf("Enter the number of vehicles:\n");
    scanf("%d", &n);

    for (i = 0; i < n; i++) {
        printf("1. Car\n2. Truck\n3. Bike\n4. Bus\n");
        printf("Enter your choice: ");
```

```c
        scanf("%d", &ch);

        switch (ch) {
            case 1:
                tot += 50;
                printf("Car: ₹50\n");
                break;
            case 2:
                tot += 100;
                printf("Truck: ₹100\n");
                break;
            case 3:
                tot += 20;
                printf("Bike: ₹20\n");
                break;
            case 4:
                tot += 80;
                printf("Bus: ₹80\n");
                break;
            default:
                printf("Invalid option\n");
                i--;
                break;
        }
    }

    printf("Total toll tax collected:%d\n", tot);
    return 0;
}
```

TOLL TAX PROGRAM
Enter the number of vehicles:
5
1. Car
2. Truck
3. Bike
4. Bus
Enter your choice: 1
Car: ₹50
1. Car
2. Truck

3. Bike
4. Bus
Enter your choice: 4
Bus: ₹80
1. Car
2. Truck
3. Bike
4. Bus
Enter your choice: 3
Bike: ₹20
1. Car
2. Truck
3. Bike
4. Bus
Enter your choice: 2
Truck: ₹100
1. Car
2. Truck
3. Bike
4. Bus
Enter your choice: 4
Bus: ₹80
Total toll tax collected:330

Question -03

`ATM Transaction System`
`Scenario:`
An ATM allows users to:
1. **`Withdraw Money`**
2. **`Deposit Money`**
3. **`Check Balance`**

Use a `function with switch-case`
to `simulate an ATM transaction`.

```c
#include <stdio.h>

void atmtrans(int ch, float *bal) {
    float amt;

    switch (ch) {
        case 1:
```

```c
            printf("Enter Amount to Withdraw: ");
            scanf("%f", &amt);
            if (amt > *bal) {
                printf("Insufficient Balance\n");
            } else {
                *bal -= amt;
                printf("Withdrawal Successful. Remaining Balance: %.2f\n",
*bal);
            }
            break;

        case 2:
            printf("Enter Amount to Deposit: ");
            scanf("%f", &amt);
            if (amt <= 0) {
                printf("Invalid deposit amount!\n");
            } else {
                *bal += amt;
                printf("Deposit Successful. Updated Balance: %.2f\n",
*bal);
            }
            break;

        case 3:
            printf("Current Balance: %.2f\n", *bal);
            break;

        default:
            printf("Invalid option\n");
            break;
    }
}

int main() {
    int ch;
    float bal = 500000.00;

    while (1) {
        printf("\nATM TRANSACTION\n");
```

```c
        printf("1. Withdraw Money\n2. Deposit Money\n3. Check Balance\n4.
Exit\n");
        printf("Enter your choice: ");
        scanf("%d", &ch);

        if (ch == 4) {
            printf("Thank you for using the ATM\n");
            break;
        }

        atmtrans(ch, &bal);
    }

    return 0;
}
```

ATM TRANSACTION
1. Withdraw Money
2. Deposit Money
3. Check Balance
4. Exit
Enter your choice: 1
Enter Amount to Withdraw: 40000
Withdrawal Successful. Remaining Balance: 460000.00

ATM TRANSACTION
1. Withdraw Money
2. Deposit Money
3. Check Balance
4. Exit
Enter your choice: 2
Enter Amount to Deposit: 450000
Deposit Successful. Updated Balance: 910000.00