

**Ex. No: 9**

**Date: 06-12-21**

## **STRUCTURES**

### **PROBLEM GIVEN:**

Write a program to create a structure for storing the customer details. Use appropriate data types to store the data (arrays, strings etc). Extend the previous program to implement the same.

### **ALGORITHM:**

Step 1: Start

Step 2: Declare necessary variables, pointer variables and structure variables.

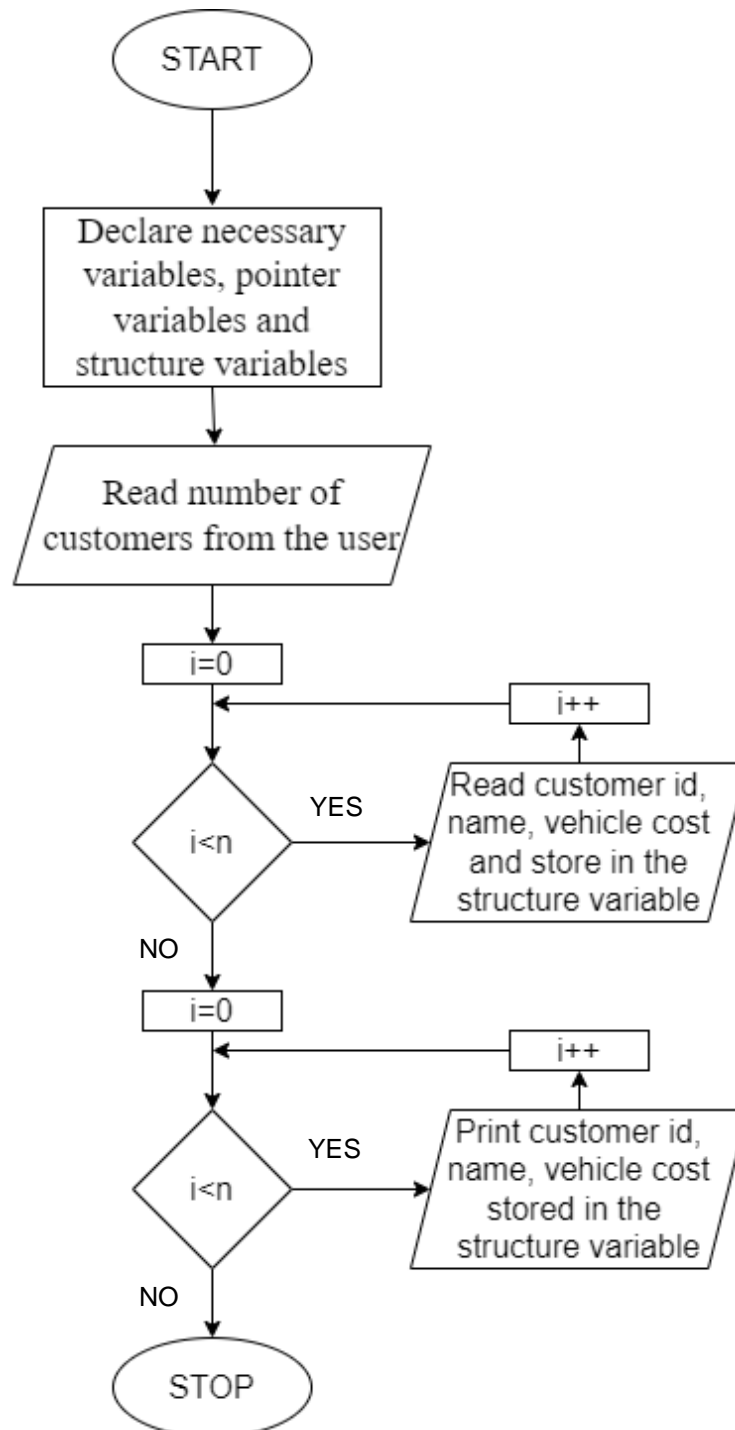
Step 3: Read number of customers from the user.

Step 4: Introduce a for loop to enter customer id, customer name and vehicle cost and store it in the structure variable.

Step 5: Display all the details stored in the structures using a for loop.

Step 6: Stop

## FLOWCHART:



## PROGRAM:

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

struct customer{
    int cid;
    char name[10];
    float vcost;
};

int main(){
    int i, j, n;
    struct customer customers[10];
    struct customer *q, *customern;

    q = (struct customer *) malloc(sizeof(struct customer));

    printf("Enter number of customers : ");
    scanf("%d", &n);

    for(i=0;i<n-1;i++){
        printf("Enter Customer ID, customer name and Vehicle cost : ");
        scanf("%d %s %f", &customers[i].cid, customers[i].name, &customers[i].vcost);
    }

    printf("Enter Customer ID, customer name and Vehicle cost : ");
    scanf("%d %s %f", &q->cid, q->name, &q->vcost);

    for(i=0;i<n-1;i++){
        printf("Name = %s\nCustomer Id = %d\nVehicle cost = %.2f\n\n", customers[i].name,
customers[i].cid, customers[i].vcost);
    }
    printf("Name = %s\nCustomer Id = %d\nVehicle cost = %.2f\n\n", q->name, q->cid, q-
>vcost);

    return 0;
}
```

## OUTPUT:

```
C:\Users\ashva\source\repos\exp9.exe
Enter number of customers : 3
Enter Customer ID, customer name and Vehicle cost : 1112 Ashvath 78844.25
Enter Customer ID, customer name and Vehicle cost : 9787 Ashwin 124545.55
Enter Customer ID, customer name and Vehicle cost : 3354 Raj 68974.99
Name = Ashvath
Customer Id = 1112
Vehicle cost = 78844.25

Name = Ashwin
Customer Id = 9787
Vehicle cost = 124545.55

Name = Raj
Customer Id = 3354
Vehicle cost = 68974.99

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Process exited after 87.96 seconds with return value 0
Press any key to continue . . .
```