

Ex. No: 10

Date: 06-12-21

FILES

PROBLEM GIVEN:

Write a program to store the customer data into a file and extract details from the file. Extend the previous program to implement the same.

ALGORITHM:

STEP 1 : START

STEP 2 : Declare all necessary variables, pointer variables, structure variables and file pointers.

STEP 3 : Get the number of customers from the user.

STEP 4 : Implement a for-loop for n times reading each user's details (customer id, customer name, customer name and Vehicle cost).

STEP 5 : Open a file in write mode. If file is not opened, Display error message and end the program.

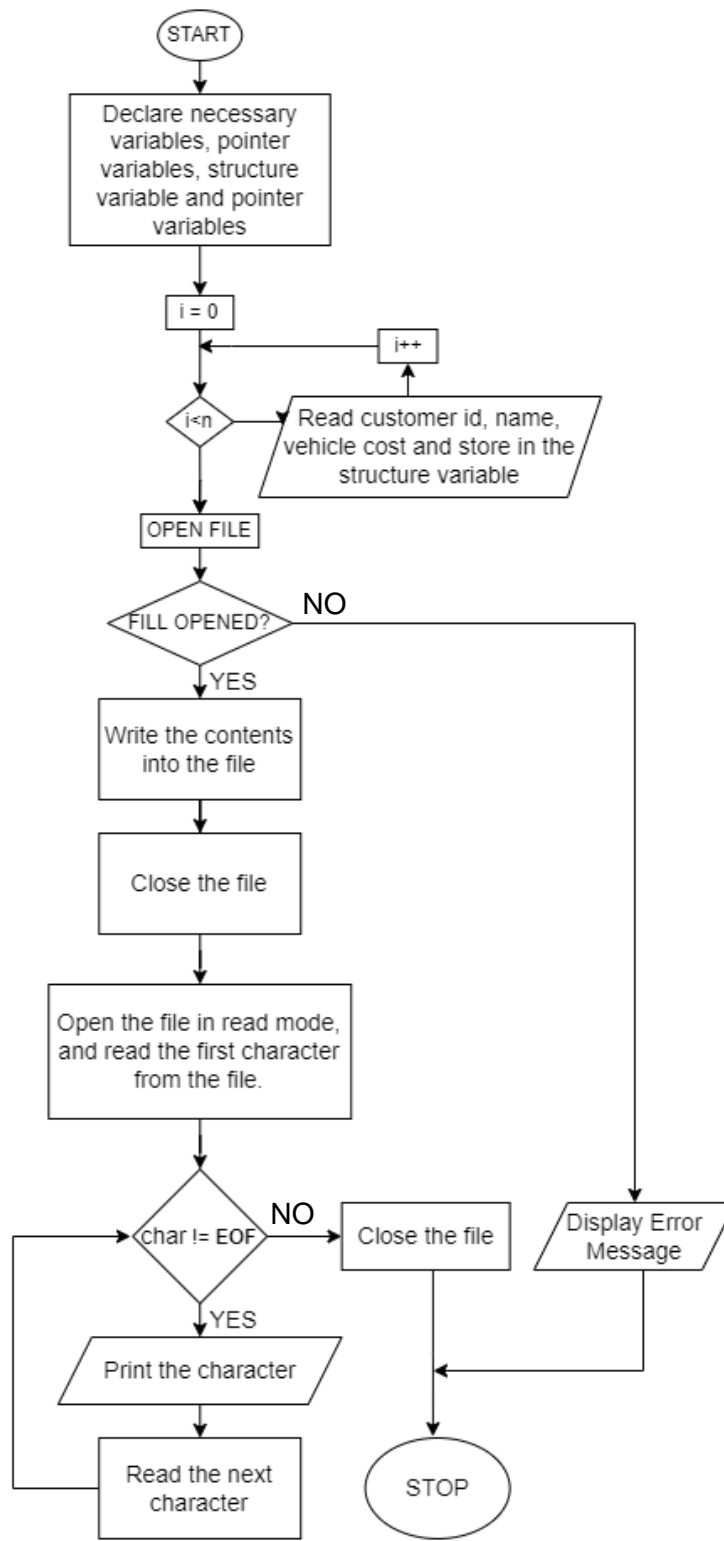
STEP 6 : If file is opened, then write the contents into the file and close the file.

STEP 7 : Close the file.

STEP 8 : Implement a while loop that check if the character is not "EOF".If yes, print the character and read the next character. If not, break the loop.

STEP 9 : 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;
    char ch;
    FILE *fp;

    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);

    fp = fopen("sample.txt", "w");

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

    fp = fopen("sample.txt", "r");
    ch = getc(fp);

    printf("\nCustomer details stored in the files are...\n");
```

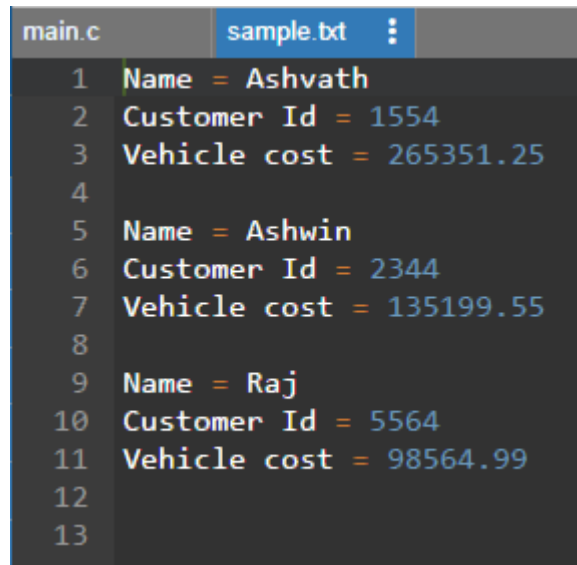
```

while(ch != EOF){
    printf("%c", ch);
    ch = getc(fp);
}

return 0;
}

```

TEXT FILE:



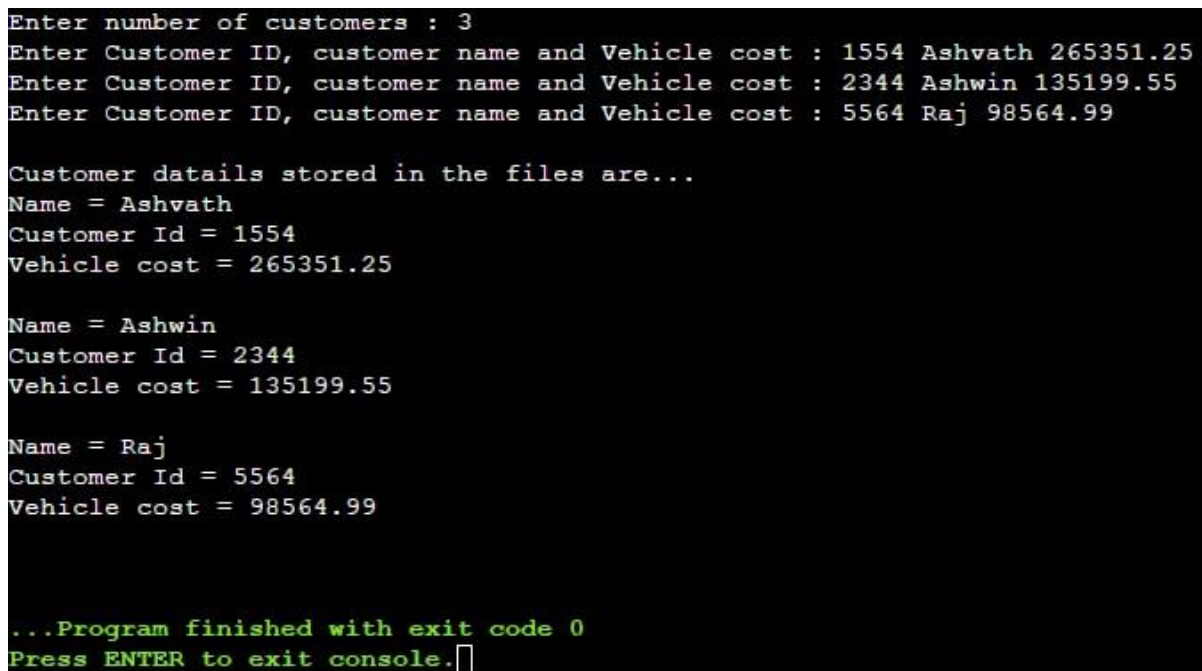
The screenshot shows a code editor with two tabs: 'main.c' and 'sample.txt'. The 'sample.txt' tab is active, displaying the following text:

```

1 Name = Ashvath
2 Customer Id = 1554
3 Vehicle cost = 265351.25
4
5 Name = Ashwin
6 Customer Id = 2344
7 Vehicle cost = 135199.55
8
9 Name = Raj
10 Customer Id = 5564
11 Vehicle cost = 98564.99
12
13

```

OUTPUT:



The screenshot shows a terminal window with the following output:

```

Enter number of customers : 3
Enter Customer ID, customer name and Vehicle cost : 1554 Ashvath 265351.25
Enter Customer ID, customer name and Vehicle cost : 2344 Ashwin 135199.55
Enter Customer ID, customer name and Vehicle cost : 5564 Raj 98564.99

Customer details stored in the files are...
Name = Ashvath
Customer Id = 1554
Vehicle cost = 265351.25

Name = Ashwin
Customer Id = 2344
Vehicle cost = 135199.55

Name = Raj
Customer Id = 5564
Vehicle cost = 98564.99

...Program finished with exit code 0
Press ENTER to exit console.

```