DATA STRUCTURES AND ALGORITHMS ASSIGNMENT NO. 1

main.c

Share Run

```c
#include <stdio.h>
struct friends
{
    char name[20];
    char petname[20];
    long int phoneno;
      struct type //type of friends
      {
       char typeoffriends[20];
       char commonfriendsname[50];
       int commonplacesvisitedtogether;
      }f1;
}f[3];
int main()
{
    int a;SS
    printf("enter the number of the friends:");
    scanf("%d",&a);
    for(int i=1;i<=3;i++)
    {
        printf("name:");
        scanf("%s",&f[i].name);
        printf("petname:");
        scanf("%s",&f[i].petname);
        printf("phoneno:");
        scanf("%ld",&f[i].phoneno);
```

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```
27          printf("type of friend:");
28          scanf("%s",&f[i].f1.typeoffriends);
29          printf("common friends name:");
30          scanf("%s",&f[i].f1.commonfriendsname);
31          printf("common places visited together:");
32          scanf("%d",&f[i].f1.commonplacesvisitedtogether);
33      }
34      printf("\nfriends list:\n");
35      printf("s.no\t\tname\t\tpetname\t\tphone no.\t\ttype of friends\t\tcommon
            friends name\t\t commom places visited together\n");
36      for(int b=1;b<=3;b++){
37         printf("%d\t\t%s\t\t%s\t\t%ld\t\t%s\t\t%s\t\t%d\n",b+1,f[b].name,f[b]
               .petname,f[b].phoneno,f[b].f1.typeoffriends,f[b].f1
               .commonfriendsname,f[b].f1.commonplacesvisitedtogether);
38      }
39          return 0;
40  }
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```

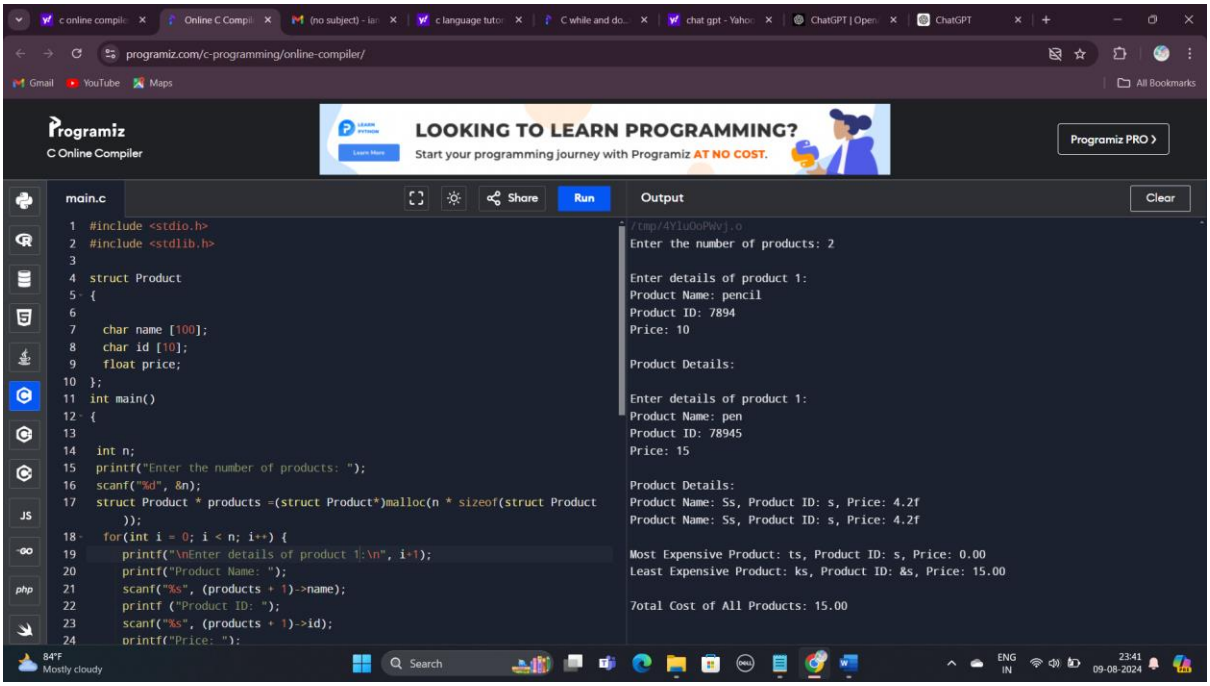

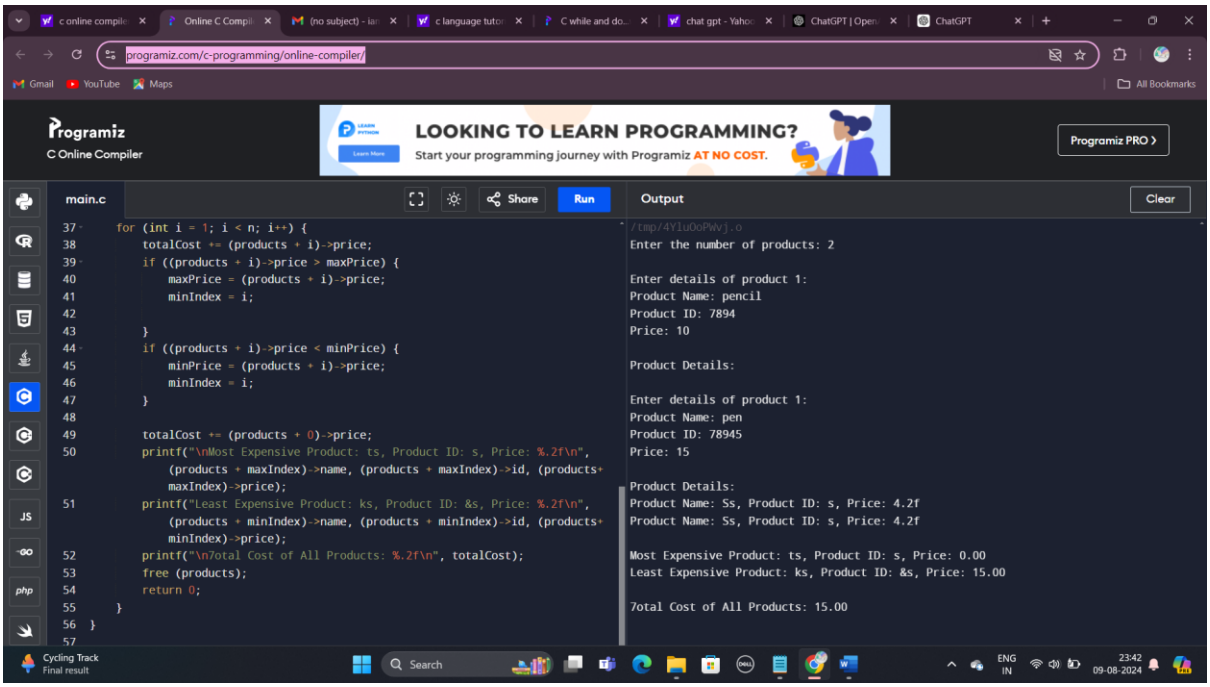

Github link: https://github.com/iamssakthi/DSA-ASSIGNMENT-1.git