

OS Practical 3

Practical Screenshots :



```
#include<stdio.h>
#include<unistd.h>
#include<fcntl.h>
```

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OS Practical 3

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

int main()
{
    int f;

    char *oid = (char*)malloc(100*sizeof(char));
    char *odate = (char*)malloc(100*sizeof(char));
    char *item = (char*)malloc(100*sizeof(char));
    char *price = (char*)malloc(100*sizeof(char));
    char *ddate = (char*)malloc(100*sizeof(char));

    f = open("YSL_Invoice.txt",O_CREAT | O_RDWR);
    printf("File descriptor : %d\n",f);

    if(f != -1)
    {
        printf("Enter Order ID : ");
        scanf("%s", oid);
        write(f,oid,sizeof(oid));

        printf("Enter Order Date : ");
        scanf("%s", odate);
        write(f,odate,sizeof(odate));

        printf("Enter Item Name : ");
        scanf("%s", item);
        write(f,item,sizeof(item));

        printf("Enter Item Price : ");
        scanf("%s", price);
        write(f,price,sizeof(price));
    }
}
```

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```
printf("Enter Delivery Date : ");
scanf("%s", ddate);
write(f, ddate, sizeof(ddate));

lseek(f, 0, SEEK_SET);
printf("\n\n-----Invoice-----\n\n");

read(f, oid, sizeof(oid));
printf("Order ID : %s\n", oid);

read(f, odate, sizeof(odate));
printf("Order Date : %s\n", odate);

read(f, item, sizeof(item));
printf("Item Name : %s\n", item);

read(f, price, sizeof(price));
printf("item Price : %s\n", price);

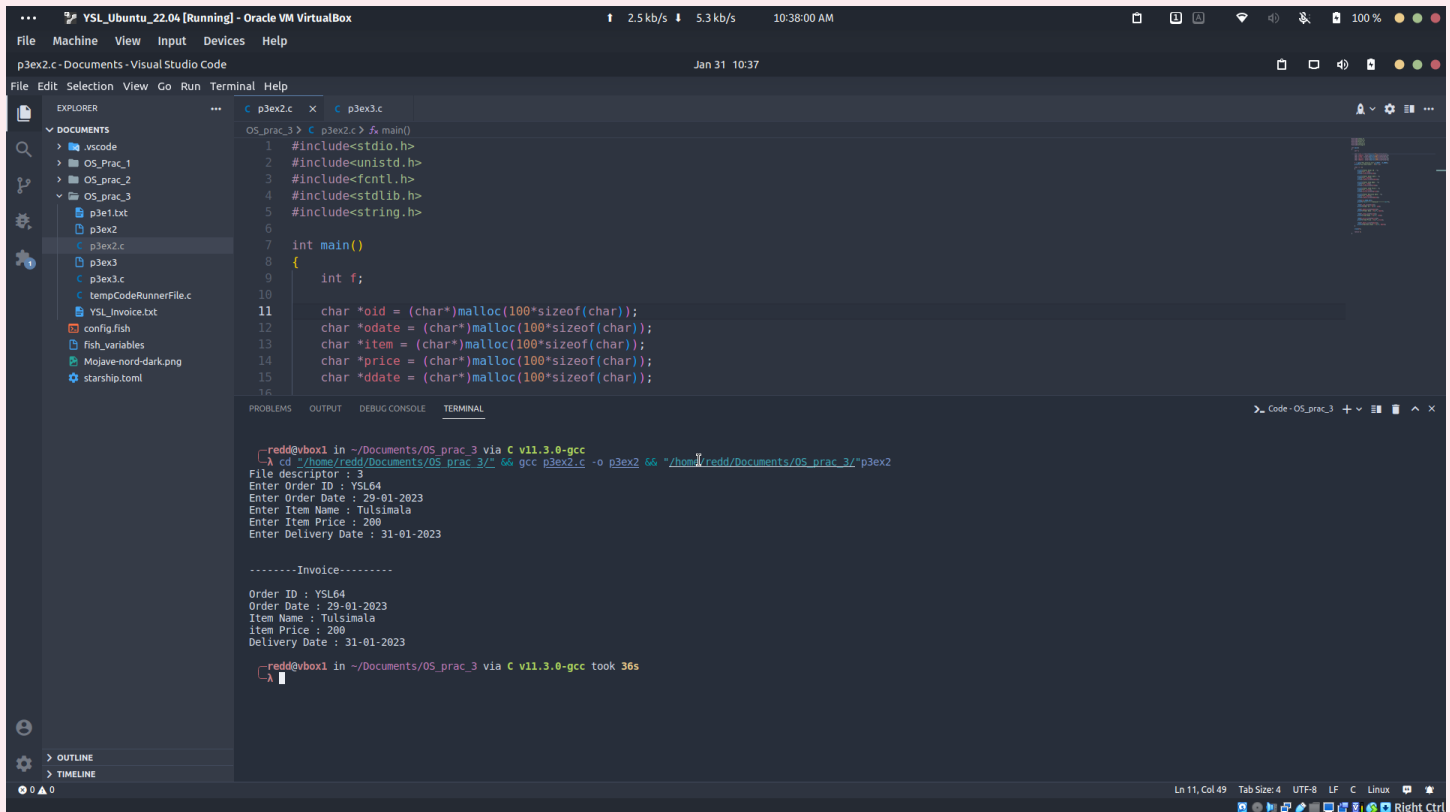
read(f, ddate, sizeof(ddate));
printf("Delivery Date : %s\n", ddate);
}

close(f);

return 0;
}
```

Output :

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```
YSL_Ubuntu_22.04 [Running] - Oracle VM VirtualBox
2.5 kb/s 5.3 kb/s 10:38:00 AM
File Machine View Input Devices Help
p3ex2.c - Documents - Visual Studio Code
Jan 31 10:37
File Edit Selection View Go Run Terminal Help

EXPLORER
DOCUMENTS
  .vscode
  OS_Prac_1
  OS_Prac_2
  OS_Prac_3
    p3e1.txt
    p3ex2
    p3ex2.c
    p3ex3
    p3ex3.c
    tempCodeRunnerFile.c
  YSL_Invoice.txt
  config.fish
  fish_variables
  Mojave-nord-dark.png
  starship.toml

p3ex2.c
1 #include<stdio.h>
2 #include<unistd.h>
3 #include<fcntl.h>
4 #include<stdlib.h>
5 #include<string.h>
6
7 int main()
8 {
9     int f;
10
11     char *oid = (char*)malloc(100*sizeof(char));
12     char *odate = (char*)malloc(100*sizeof(char));
13     char *item = (char*)malloc(100*sizeof(char));
14     char *price = (char*)malloc(100*sizeof(char));
15     char *ddate = (char*)malloc(100*sizeof(char));
16
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc
└─A cd ~/home/redd/Documents/OS_prac_3/" gcc p3ex2.c -o p3ex2 && "home/redd/Documents/OS_prac_3/"p3ex2
File descriptor : 3
Enter Order ID : YSL64
Enter Order Date : 29-01-2023
Enter Item Name : Tulsimala
Enter Item Price : 200
Enter Delivery Date : 31-01-2023

-----Invoice-----
Order ID : YSL64
Order Date : 29-01-2023
Item Name : Tulsimala
Item Price : 200
Delivery Date : 31-01-2023

--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc took 36s
└─A
```

3. Implement program that can open the file "ICTGUNI.txt" in the current directory, and prints out the return value of the open() system call. If "ICTGUNI.txt" exists, open() will return a non-negative integer (three). If "ICTGUNI.txt" does not exist, then it will return -1.

Practical Screenshots :

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```
YSL_Ubuntu_22.04 [Running] - Oracle VM VirtualBox
7.2 kb/s 19.8 kb/s 10:26:43 AM
File Machine View Input Devices Help
p3ex3.c - Documents - Visual Studio Code
Jan 31 10:26
File Edit Selection View Go Run Terminal Help

EXPLORER
DOCUMENTS
  .vscode
  OS_Prac_1
  OS_Prac_2
  OS_Prac_3
    ICTGUNI.txt
    p3e1.txt
    p3ex2
    p3ex2.c
    p3ex3
    p3ex3.c
    tempCodeRunnerFile.c
  config.fish
  fish_variables
  Mojave-nord-dark.png
  starship.toml

p3ex3.c
1 #include<fcntl.h>
2 #include<stdio.h>
3
4 int main()
5 {
6     int file_desc = open("ICTGUNI.txt", O_CREAT | O_RDWR);
7     printf("File descriptor : %d",file_desc);
8     return 0;
9 }
10

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc took 4ms
--ls
p3e1.txt p3ex2 p3ex2.c p3ex3 p3ex3.c tempCodeRunnerFile.c
--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc took 7ms
--cd ~/home/redd/Documents/OS_prac_3/" gcc p3ex3.c -o p3ex3 ~/home/redd/Documents/OS_prac_3/"p3ex3
File descriptor : 3
--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc took 30ms
--ls
ICTGUNI.txt p3e1.txt p3ex2 p3ex2.c p3ex3 p3ex3.c tempCodeRunnerFile.c
--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc took 1ms
--cd ~/home/redd/Documents/OS_prac_3/" gcc p3ex3.c -o p3ex3 ~/home/redd/Documents/OS_prac_3/"p3ex3
File descriptor : -1
--redd@vbox1 in ~/Documents/OS_prac_3 via C v11.3.0-gcc took 27ms
--
```