

TE IT

Name : Omkar Gurav

Roll no : 8048

Implement an assignment using File Handling System Calls (Low level system calls like open, read, write, etc).

```
#include<stdio.h>
#include<sys/types.h>
#include<sys/stat.h>
#include<stdlib.h>
#include<fcntl.h>
#include<string.h>
int main()
{
    int fd, ch;
    char fname[25];
    char buffer[80];
    ssize_t ret_in, ret_out;
    char message[100];
    do
    {
        printf("1.Create File\n");
        printf("2.Write\n");
        printf("3.Read\n");
        printf("4.Exit\n");
        printf("Enter your choice\t");
        scanf("%d", &ch);
        if(ch==1)
        {
            printf("Enter File Name\t");
            scanf("%s",fname);
            fd=creat(fname,S_IREAD| S_IWRITE);
            if(fd== -1)
```

```

        printf("Error in Opening file %s\n",fname);
    else
    {
        printf("File %s is opened read/write access\n",fname);
        printf("%s is currently empty\n",fname);
    }
    close(fd);
}
if(ch==2)
{
    printf("Enter file name\t");
    scanf("%s",fname);
    fd=open(fname,O_WRONLY,1);
    if(fd!=-1)
    {
        printf("file %s opened for write access\n",fname);
        printf("Enter Data\t");
        scanf("%s",message);
        write(fd,message,sizeof(message));
        close(fd);
    }
}
if(ch==3)
{
    printf ("Enter file name\t");
    scanf("%s",fname);
    fd=open(fname,O_RDONLY,0);
    if(fd!=-1)
    {
        printf("%s opened for read access\n",fname);
        if(read(fd,buffer,sizeof(buffer)))
            printf("\n\"%s\" was written to %s\n",buffer,fname);
        else
            printf("***Error reading %s **\n",fname);
    }
    close(fd);
}
}
while(ch!=4);
close(fd);
exit(0);
}

```

Output:

1.Create File

2.Write

3.Read

4.Exit

Enter your choice 1

Enter File Name sample.txt

File sample.txt is opened read/write access

sample.txt is currently empty

1.Create File

2.Write

3.Read

4.Exit

Enter your choice 2

Enter file name sample.txt

file sample.txt opened for write access

Enter Data Hi

1.Create File

2.Write

3.Read

4.Exit

Enter your choice 3

Enter file name sample.txt

sample.txt opened for read access

"Hi" was written to sample.txt

1.Create File

2.Write

3.Read

4.Exit

Enter your choice 4