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1  /*
2  Name - Atharva Paliwal
3  Experiment no.2 - Problem Statement 2
4  */
5
6  #include<unistd.h>
7  #include<stdio.h>
8  #include<fcntl.h>
9  #include<stdlib.h>
10 #include <sys/types.h>
11
12 int main()
13 {
14     int fd,option,sz,temp,n;
15     char buffer[80];
16     char str[50]="Welcome";
17     char d,name[50];
18
19     do{
20         printf("\nOperation?\n");
21         printf("1.Create 2.Open 3.Read 4.Write 5.Close 6.lseek 7.Unlink 8.reverse
22             9.resource allocate\n");
23         scanf("%d",&option);
24         switch(option)
25         {
26             case 1: ;
27                 fd=open("ras.txt",O_RDONLY | O_CREAT);
28                 if(fd!=-1)
29                 {
30                     printf("\nFile is created\n");
31                 }
32                 break;
33             case 2: ; fd=open("am.txt",O_CREAT | O_RDWR);
34                 if(fd<0)
35                 {
36                     perror("r1");
37                     exit(1);
38                 }
39                 else
40                 {
41                     printf("File opened at %d",fd);
42                 }
43                 break;
44             case 3: ; sz=read(fd,buffer,sizeof(str));
45                 if(sz==-1 || sz==0)
46                 {
47                     printf("not allowed\n");
48                 }
49                 else{
50                     printf("Called read.returned that" " %d bytes were read.\n",sz);
51                     buffer[sz]='\0';
52                     printf("\nas follows:%s\n",str); }
53                 break;
54             case 4: ; fd=write(fd,str,sizeof(str));
55                 printf("Called write" "It returned %d\n",sz);
56                 break;
57             case 5: ; int close(int fd);
58                 break;
59             case 6:if(lseek(fd,10,SEEK_SET) < 0)
60                 {
61                     printf("lseek implemented");
62                     return 1;
63                 }
64                 break;
65             case 7: unlink("ras.txt");
66                 break;
67
68             case 8: printf("Enter the file\n");
69                 scanf("%s",name);

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69         fd=open(name,O_RDONLY);
70         if(fd<0){
71             printf("error");}
72         n=lseek(fd,0,SEEK_END);
73         while(n>0)
74         {
75             read(fd,&d,1);
76             printf("%c",d);
77             lseek(fd,-2,SEEK_CUR);
78             n--;
79         }
80         break;
81
82
83     case 9:
84
85
86         temp=getpid();
87         printf("\n%d\n",temp);
88         char tt2[100];
89         sprintf(tt2,"ls /proc/%d/fd",temp);
90         system(tt2);
91         break;
92
93     default:printf("option invalid");
94             break;
95     }
96     }while(option!=0);
97 }
98
```