

OS-6

-2019103023

1)DUP

```
[s2019103023@centos8-linux Thu Mar 25 09:43 AM lab06]$ nano krishna.txt
[s2019103023@centos8-linux Thu Mar 25 09:47 AM lab06]$ nano dup.c
[s2019103023@centos8-linux Thu Mar 25 09:51 AM lab06]$ gcc -o dup dup.c
[s2019103023@centos8-linux Thu Mar 25 09:51 AM lab06]$ ./dup.c
-bash: ./dup.c: Permission denied
[s2019103023@centos8-linux Thu Mar 25 09:51 AM lab06]$ ./dup
[s2019103023@centos8-linux Thu Mar 25 09:51 AM lab06]$ cat krishna.txt
```

```
Hello world
Hello world again
[s2019103023@centos8-linux Thu Mar 25 09:52 AM lab06]$ cat dup.c
#include<stdio.h>
#include<unistd.h>
#include<fcntl.h>
void main() {
    char str1[] = "Hello world\n";
    char str2[] = "Hello world again\n";
    int fd = open("krishna.txt",O_WRONLY|O_APPEND);
    if(fd<0)
        printf("File open error!\n");
    int fd1 = dup(fd);
    write(fd,str1,sizeof(str1));
    write(fd1,str2,sizeof(str2));
}
```

2)DUP2

```
[s2019103023@centos8-linux Thu Mar 25 09:52 AM lab06]$ nano house.txt
[s2019103023@centos8-linux Thu Mar 25 09:56 AM lab06]$ nano dup2.c
[s2019103023@centos8-linux Thu Mar 25 09:58 AM lab06]$ gcc -o dup2 dup2.c
[s2019103023@centos8-linux Thu Mar 25 09:58 AM lab06]$ ./dup2
Hello world
```

```
[s2019103023@centos8-linux Thu Mar 25 10:02 AM lab06]$ cat dup2.c
#include<stdio.h>
#include<stdlib.h>
#include<unistd.h>
#include<fcntl.h>
void main() {
    int fd = open("house.txt",O_WRONLY|O_APPEND);
    dup2(fd,1);
    printf("Hello world\n");
}
```

3)readdir

```
[s2019103023@centos8-linux Thu Mar 25 10:10 AM lab06]$ cd folder
[s2019103023@centos8-linux Thu Mar 25 10:11 AM folder]$ touch file1 file2 file3
[s2019103023@centos8-linux Thu Mar 25 10:11 AM folder]$ cd ..
[s2019103023@centos8-linux Thu Mar 25 10:11 AM lab06]$ gcc -o readdir readdir.c
[s2019103023@centos8-linux Thu Mar 25 10:11 AM lab06]$ ./readdir
.
..
file1
file2
file3
[s2019103023@centos8-linux Thu Mar 25 10:11 AM lab06]$ cat readdir.c
#include<stdio.h>
#include<stdlib.h>
#include<dirent.h>
void main() { struct dirent *de;
  DIR * dr = opendir("./folder");
  if(!dr)
    printf("Current directory open failed!\n");
    while(de = readdir(dr))
      printf("%s\n",de->d_name);
    closedir(dr);
}
```

4)scandir

```
[s2019103023@centos8-linux Thu Mar 25 10:12 AM lab06]$ nano scandir.c
[s2019103023@centos8-linux Thu Mar 25 10:15 AM lab06]$ gcc -o scandir scandir.c
[s2019103023@centos8-linux Thu Mar 25 10:15 AM lab06]$ ./scandir
file3
file2
file1
..
.
[s2019103023@centos8-linux Thu Mar 25 10:15 AM lab06]$ cat scandir.c
#include<stdio.h>
#include<stdlib.h>
#include<stdint.h>
#include<dirent.h>
int main() {
  struct dirent **name;
  int no; no = scandir("./folder",&name,NULL,alphasort);
  if(no>0) { while(no-->0)
    printf("%s\n", name[no]->d_name); free(name);
  }
}
```