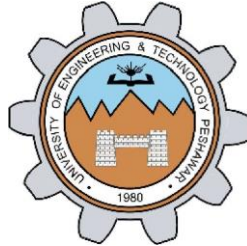


LAB #07

GIVEN TASKS IN CLASS



Spring 2023

CSE-204L Operating Systems Lab

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Section: C

“On my honor, as a student of the University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work”

Submitted to:

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(18 May 2023)

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TASK 1

CODE:

```
task1.c
~/Desktop/OS LAB/LAB7

1#include<stdio.h>
2#include<stdlib.h>
3
4
5int main(int argc,char* argv[]){
6
7    int sum=0;
8    for(int i=1;i<argc;i++){
9        sum+=atoi(argv[i]);
10    }
11
12    printf("Sum = %d\n",sum);
13    return 0;
14}
```

Output:

```
muhammad@muhammad-VirtualBox: ~/Desktop/OS LAB/LAB7
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$ ./task1.o 2 2 2 3 1
Sum = 10
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$
```

TASK 2

CODE:

```
*task2.c
~/Desktop/OS LAB/LAB7

1#include<stdio.h>
2#include<unistd.h>
3#include<sys/wait.h>
4
5int main(){
6
7    int pid=fork();
8
9    if (pid==-1){
10        printf("Fork function failed ");
11    }
12
13    else if(pid){
14        execlp("./task1.o","task1.o","1","2","3","4",NULL);
15        printf("child process");
16    }
17
18
19    return 0;}
```

Output:

```
muhammad@muhammad-VirtualBox: ~/Desktop/OS LAB/LAB7
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$ ./task2.o
Sum = 10
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$
```

TASK 3

CODE:

```
task3.c
~/Desktop/OS LAB/LAB7

1#include<stdio.h>
2#include<stdlib.h>
3#include<unistd.h>
4#include<sys/wait.h>
5
6
7int main(int argc , char *argv[]){
8
9    for(int i=1;i<argc;i++){
10        int pid=fork();
11        if(pid== 0){
12            printf("Child Process\n");
13            execlp(argv[i],argv[i],NULL);
14        }
15
16        for(int i =1;i<argc;i++){
17            int r =wait(NULL);
18        }
19
20
21
22    return 0;}
```

Output:

```
muhammad@muhammad-VirtualBox: ~/Desktop/OS LAB/LAB7
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$ ^C
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$ ./task3.o ps -l
Child Process
Child Process
  PID TTY          TIME CMD
  4685 pts/0        00:00:00 bash
  4711 pts/0        00:00:00 task3.o
  4712 pts/0        00:00:00 ps
muhammad@muhammad-VirtualBox:~/Desktop/OS LAB/LAB7$
```