```
root@v1712827685:~# ./a.out
Parent process: PID = 652333
Child process: PID = 652334
hello execvChild process exited with status: 0
root@v1712827685:~#
```

```
root@v1712827685:~# ./a.out
ENTER THE NUMBER OF PROCESS : 3
ENTER THE ARRAY OF PROCESS : 10 15 30
ENTER THE NUMBER OF MEMORY BLOCK : 2
ENTER THE ARRAY OF MEMORY BLOCK : 50 10
                FIRST FIT
10 ALLOCATED IN 50 MEMORY BLOCK => 40 SPACE REMAINING
15 ALLOCATED IN 40 MEMORY BLOCK => 25 SPACE REMAINING
30 CANNOT BE ALLOCATED
                BEST FIT
10 ALLOCATED IN 10 MEMORY BLOCK => 0 SPACE REMAINING
15 ALLOCATED IN 50 MEMORY BLOCK => 35 SPACE REMAINING
30 ALLOCATED IN 35 MEMORY BLOCK => 5 SPACE REMAINING
                WORST FIT
10 ALLOCATED IN 50 MEMORY BLOCK => 40 SPACE REMAINING
15 ALLOCATED IN 40 MEMORY BLOCK => 25 SPACE REMAINING
30 CANNOT BE ALLOCATED
```

```
root@v1712827685:~/os# touch example.txt
root@v1712827685:~/os# ./a.out
File opened
File closed
File size: 0 bytes
Contents of the current directory:
A1.c
A4.c
A2.c
a.out
example.txt
..
.
A3.c
root@v1712827685:~/os#
```

```
root@v1712827685:~# gcc recv.c
root@v1712827685:~# ./s
Data written to shared memory: Hello, this is shared memory!
root@v1712827685:~# ./a.out
Data read from shared memory: Hello, this is shared memory!
root@v1712827685:~#
```

```
root@v1712827685:~# ./a.out
Produced: 1
Consumed: 1
Produced: 2
Consumed: 2
Produced: 3
Consumed: 3
Produced: 4
Consumed: 4
Produced: 5
Consumed: 5
Produced: 6
Consumed: 6
Produced: 7
Consumed: 7
Produced: 8
Consumed: 8
Produced: 9
Consumed: 9
```

```
root@v1712827685:~# ./a.out
Enter number of processes and resources: 2 2
Enter available resources: 1 1
Enter maximum demand matrix:
2 2
1 1
Enter allocation matrix:
0 0
0 0
Enter request matrix:
Enter resource request for process 0: 1 0
Enter resource request for process 1: 0 1
The system is not in a safe state.
root@v1712827685:~# ./a.out
Enter number of processes and resources: 2 2
Enter available resources: 2 2
Enter maximum demand matrix:
3 3
2 2
Enter allocation matrix:
1 1
1 0
Enter request matrix:
Enter resource request for process 0: 0 1
Enter resource request for process 1: 1 1
The system is in a safe state.
Safe sequence: 0 1
```