

### Additional explanation for code mm.cpp of report6

1. Menu option 1 will not be executed more than once
2. Test cases would specify an algorithm before allocating space to the process
3. Buddy system only allocate space of  $2^k$  units, in which  $k$  is an integer
4. If there has no enough space for a new process, the process will not execute.
5. After killing a process, continuous free space needs to be merged

Here is an example for case 5:

**after (2,1),(3,200),(3,300),(3,300),(3,200),5 you should get:**

\*\*\*\*\**Free Memory*\*\*\*\*\*

start_addr	size
1000	24

Totally 1 free blocks

\*\*\*\*\*Used Memory\*\*\*\*\*

PID	ProcessName	start_addr	size
1	process1	0	200
2	process2	200	300
3	process3	500	300
4	process4	800	200

Totally 4 allocated blocks

**Then,after (4,1),(4,2),(4,4),5 you should get:**

\*\*\*\*\**Free Memory*\*\*\*\*\*

start_addr	size
0	500
800	224

Totally 2 free blocks

\*\*\*\*\*Used Memory\*\*\*\*\*

PID	ProcessName	start_addr	size
3	process3	500	300

Totally 1 allocated blocks

**Then,after (3,100),5 you should get:**

\*\*\*\*\**Free Memory*\*\*\*\*\*

start_addr	size
0	500
900	124

Totally 2 free blocks

\*\*\*\*\*Used Memory\*\*\*\*\*

PID	ProcessName	start_addr	size
3	process3	500	300
5	process5	800	100

Totally 2 allocated blocks