## Answer 9.4

- 1. In our low-level management program we have not used a roundmb function. The roundmb function is used in order to make the requested memory a multiple of 8.
- 2. Suppose now we are to assign memory of 1022 bytes using getstk and mygetstk (our implementation of getstk).
- 3. In case of getstk, the 1022 bytes will be rounded to 1024 since 1022 is not a multiple of 8.
- 4. In case of mygetstk, memory of 1022 bytes will only be allocated since we have not used the roundmb function.
- 5. Also we have not deallocated the memory that has being allocated to the process.
- 6. The freestk() function in kill() system call, is not executed for our process. A flag is used in order by pass the call for our process.
- 7. Similarly any memory that has been allocated dynamically is also not deallocated.

## Answer 9.7

- 1. A flag is passed in the create() system call, so that the following code is executed only for our process
- 2. The entire stack which is allocated for the process is initialized with OXFF.
- 3. After the process is executed and is about to exit, we check the stack to find out how many locations contain OXFF.
- 4. Subtracting this value from the allocated length gives us the maximum stack that has been used by the process.

## Contribution

xsh\_avail\_mem.c Pratik Patel
xsh\_max\_stack.c Anand Nahar
xsh\_per\_mem.c Anand Nahar
create.c Anand Nahar
mygetmem.c Pratik Patel
mygetstk.c Pratik Patel