Operating Systems
CSC 341/641

Program 2
Message Queues

Modify your shell to accept the `create` command. `create` will receive a process_name as an argument and will execute it in the background.

        create server_process
        create client_process

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The server (`server_process`) will create a *message queue* to communicate with its clients (`client_process`). Server and clients must "agree" upon the key value they will use to access the message queue. Clients read a command from `STDIN` and will post the command to the message queue, requesting the service from the server. The server will perform the requested action and the result will be sent to the client through the message queue. Clients will display the results on `STDOUT`, preceded by its `PID`.

Clients identify themselves in the message queue using their `pid`.

The server will intercept the `USR1` signal. The `USR1` signal will tell the server to terminate. The server will remove the message queue and terminate.

Clients that try to access the message queue and receive an error, must terminate, after displaying the appropriate message.