/\*\* First test if everything is okay \*\*/

=> AT

<= AT /\*\* This should come back. SIM900 default is to echo back commands you enter \*\*/

<= OK /\*\* This string should tell you all is well\*\*/

=>AT+CPIN? /\*\*This is to check if SIM is unlocked. This sample assumes unlocked SIMs\*\*/

<= +CPIN: READY /\*\* If your response contains this, then it means SIM is unlocked and ready\*\*/

=>AT+CREG? /\*\*This checks if SIM is registered or not\*\*/

<=+CREG: 0,1 /\*\*This string in the response indicates SIM is registered\*\*/

=>AT+CGATT? /\*\*Check if GPRS is attached or not\*\*/

<=+CGATT: 1 /\*\*A response containing this string indicates GPRS is attached\*\*/

=>AT+CIPSHUT /\*\*Reset the IP session if any\*\*/

<=SHUT OK /\*\*This string in the response represents all IP sessions shutdown.\*\*/

=>AT+CIPSTATUS /\*\*Check if the IP stack is initialized\*\*/

<=STATE: IP INITIAL /\*\*This string in the response indicates IP stack is initialized\*\*/

=>AT+CIPMUX=0 /\*\*To keep things simple, I’m setting up a single connection mode\*\*/

<=OK /\*\*This string indicates single connection mode set successfully at SIM 900\*\*/

=>AT+CSTT= “APN”, “UNAME”, “PWD” /\*\*Start the task, based on the SIM card you are using, you need to know the APN, username and password for your service provider\*\*/

<= OK /\*\*This response indicates task started successfully\*\*/

=> AT+CIICR /\*\*Now bring up the wireless. Please note, the response to this might take some time\*\*/

<=OK /\*\*This text in response string indicates wireless is up\*\*/

=>AT+CIFSR /\*\*Get the local IP address. Some people say that this step is not required, but if I do not issue this, it was not working for my case. So I made this mandatory, no harm.\*\*/

<= xxx.xxx.xxx.xxx /\*\*If previous command is successful, you should see an IP address in the response\*\*/

=>AT+CIPSTART= “TCP” , “www.vishnusharma.com”, “80” /\*\*Start the connection, TCP, domain name, port\*\*/

<= CONNECT OK /\*\*This string in the response indicates TCP connection established\*\*/

=>AT+CIPSEND /\*\*Request initiation of data sending (the request)\*\*/

<= > /\*\*The response should be the string “>” to indicate, type your data to send\*\*/

=> xxxxxx /\*\*Just type anything for now\*\*/

=>#026 /\*\*Now type the sequence #026. This tells the terminal.exe to send the hex code 0x1a (which is Ctrl+Z) to indicate end of data sending\*\*/

<= xxxxxxxxxx /\*\*You should get some response back from the server…it would generally be a complain that the request string was not valid…but that is a different subject…you have established the connection\*\*/

/\*\*To close the connection\*\*/

=>AT+CIPSHUT /\*\*Request shutting down of the current connections\*\*/

<=SHUT OK /\*\*Indicates shutdown successful\*\*/

AT+HTTPINIT //Init http service

AT+HTTPPARA = “CID”,1 //Set parameters for HTTP session

AT+HTTPPARA=“URL”,”www.ewh.com”

AT+HTTPDATA=100,10000 //POST the data whose size is 100 Bytes and the maximum latency time for inputting is 10000 ms. It is recommended to set the latency time long enough to download all the data in the latency time.

AT+HTTPACTION=1 //POST session start

<= +HTTPACTION:1,200,0 //POST successfully

AT+HTTPTERM //Terminate http service

SIM900 Documentation p.11

(http://www.reyax.com/Module/GSM/SIM900D/AN\_SIM900\_FTP\_HTTP\_AT\_COMMANDS\_USER\_GUIDE\_beta\_V1.00.pdf)

TCP Connection over GPRS

(<https://vsblogs.wordpress.com/2013/11/28/tcp-connection-over-gprs-using-sim900-and-at-commands/)>

Items:

GSM-GPRS board

RS-232 DB9 connector (interfaces with board)

USB to RS-232 board

RS-232 cable (male/female?)

SIM card

2 Amp power supply