**Protocol table for cafeClient and cafeServer:**

|  |  |  |
| --- | --- | --- |
| **Options** | **CafeClient** | **cafeServer** |
|  |  | [**RUN** cafeServer] |
|  |  | **[DISPLAY]--** “cafe server initialised and waiting for client connection on 7777” |
|  | [**RUN** cafeClient] |  |
|  | **[DISPLAY]--** “Enter Server’s IP address:” |  |
|  |  | **[cafeClient connection established]** |
| Start of While | **WHILE NOT TERMINATED** | **WHILE NOT TERMINATED** |
|  |  | **[SEND]--** "cafeServer ready and waiting" |
|  |  | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[RECEIVE]--** "CafeServer ready and waiting" |  |
|  | **[DISPLAY]—Menu Option** |  |
| Option 5 | **[SEND]--**  “Add credit ” to cafeServer |  |
| Start of option |  | **[RECEIVE]--** “Add credit” from cafeClient |
|  |  | **[SEND]--** ”Send credit value” to cafeClient |
|  | **[RECEIVE]--** “Send credit value” from cafeServer |  |
|  | **[SEND]--** Credit Value “20” to cafeServer |  |
|  |  | **[RECEIVE]--** Credit Value"20" from cafeClient |
|  |  | **[SEND]--** "Your new credit is 30" to cafeClient |
|  | **[RECEIVE]--** "Your new credit is 30" from cafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** “cafeServer ready" from cafeServer |  |
| End of option | **-------------------------------------------------------------** | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[DISPLAY]—Menu Option** |  |
| Option 6 | **[SEND]--** “See credit” to cafeServer |  |
| Start of option |  | **[RECEIVE]--** “See credit” from cafeClient |
|  |  | **[SEND]--**Current Credit “30” to cafeClient |
|  | **[RECEIVE]--** Current Credit “30” from cafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** "CafeServer ready" from cafeServer |  |
| End of option | **---------------------------------------------------------** | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[DISPLAY]—Menu Option** |  |
| Option 1 | **[SEND]--** “Cola” to cafeServer |  |
| Start of option |  | **[RECEIVE]--** “Cola” from cafeClient |
|  |  | **[SEND]--** “Please enter quantity (integer)” to cafeClient |
|  | **[RECEIVE]--** “Please enter quantity (integer)” from cafeServer |  |
|  | **[SEND]--** “2” to cafeServer |  |
|  |  | **[RECEIVE]--**"2" from cafeClient |
|  |  | **[SEND]--** " Your new credit is 27.60" to cafeClient |
|  | **[RECEIVE]--** "Your new credit is 27.60" from cafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** "cafeServer ready" from cafeServer |  |
| End of option | **-------------------------------------------------------------** | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[DISPLAY]—Menu Option** |  |
| Option 2 | **[SEND]--** “sandwich” to cafeServer |  |
| Start of option |  | **[RECEIVE]--** “sandwich” from cafeClient |
|  |  | **[SEND]--** “Please enter quantity (integer)” to cafeClient |
|  | **[RECEIVE]--** “Please enter quantity (integer)” from cafeServer |  |
|  | **[SEND]--** “3” to cafeServer |  |
|  |  | **[RECEIVE]--**"3" from cafeClient |
|  |  | **[SEND]--** "Confirmation Your new credit 18" to cafeClient |
|  | **[RECEIVE]--** "Confirmation Your new credit is 18" from cafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** "CafeServer ready" from cafeServer |  |
| End of option | **-------------------------------------------------------------** | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[DISPLAY]—Menu Option** |  |
| Option 3 | **[SEND]--** “crisps” to cafeServer |  |
| Start of option |  | **[RECEIVE]--** “crisps” from cafeClient |
|  |  | **[SEND]--** “Please enter quantity (integer)” to cafeClient |
|  | **[RECEIVE]--** “Please enter quantity (integer)” from cafeServer |  |
|  | **[SEND]--** “5” to cafeServer |  |
|  |  | **[RECEIVE]--**"5" from cafeClient |
|  |  | **[SEND]--** "Confirmation Your new credit is 15.50" to cafeClient |
|  | **[RECEIVE]--** "Confirmation Your new credit is 15.50" from cafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** "CafeServer ready" from cafeServer |  |
| End of option | **---------------------------------------------------------** | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[DISPLAY]—Menu Option** |  |
| Option 4 | **[SEND]--** “Chocolate bar” to cafeServer |  |
| Start of option |  | **[RECEIVE]--** “Chocolate bar” from cafeClient |
|  |  | **[SEND]--** “Please enter quantity (integer):” to cafeClient |
|  | **[RECEIVE]--**“Please enter quantity (integer):” from cafeServer |  |
|  | **[SEND]--** “5” to cafeServer |  |
|  |  | **[RECEIVE]--**"5" from cafeClient |
|  |  | **[SEND]--** "Confirmation Your new credit is 8.75 " to cafeClient |
|  | **[RECEIVE]--** "Confirmation Your new credit is 8.75 " from cafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** "CafeServer ready" from cafeServer |  |
| End of option | **-------------------------------------------------------------** | **[DISPLAY]--** “cafeServer ready and waiting…” |
|  | **[DISPLAY]—Menu Option** |  |
| Option 0 | **[SEND]--** “0” to cafeServer |  |
| Start of option |  | **[RECEIVE]--**“0” from cafeClient |
|  |  | **[SEND]--** “You have chosen 0-Quit cafeClient terminated” to cafeClient |
|  | **[RECEIVE]--** “You have chosen 0-Quit cafeClient terminated” from CafeServer |  |
|  | **[SEND]--** "Next order please" To cafeServer |  |
|  |  | **[RECEIVE]--** "Next order please" from cafeClient |
|  |  | **[SEND]--** "Cafe server ready" to cafeClient |
|  | **[RECEIVE]--** "CafeServer ready" from cafeServer |  |
|  | **[SEND]--** “endcomms” to cafeServer |  |
|  |  | **[RECEIVE]--** “endcomms” from Cafeclient |
| End of While | **WHILE TERMINATED** | **WHILE TERMINATED** |
| End of option | **---------------------------------------------------------** |  |