**Project2Task2Server**

import java.net.\*;  
import java.io.\*;  
import java.util.Scanner;  
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public class AddingServerUDP{  
 static int *sum*;  
 public static void main(String args[]){  
 *sum* = 0;  
 DatagramSocket aSocket = null;  
 byte[] buffer = new byte[1000];  
 System.*out*.println("Server started.");  
 int listenPort = 6789;  
 try{  
 aSocket = new DatagramSocket(listenPort);  
 DatagramPacket request = new DatagramPacket(buffer, buffer.length);  
 // Whenever the aSocket receive a request from the client side, it will add it to the sum variable  
 // and return the sum value. It will then print out the sum  
 while(true){  
 // receive a request from the client  
 aSocket.receive(request);  
 // Create a DatagramPacket object with the request  
 String requestString = new String(request.getData()).substring(0,request.getLength());  
 // add the integer from the client and add it to the sum variable  
 *add*(Integer.*parseInt*(requestString));  
 byte [] m = String.*valueOf*(*sum*).getBytes();  
 DatagramPacket reply = new DatagramPacket(m,  
 m.length, request.getAddress(), request.getPort());  
  
 // send the reply back to the client  
 System.*out*.println("Returning sum of " + *sum* + " to client");  
 aSocket.send(reply);  
 }  
 }catch (SocketException e){System.*out*.println("Socket: " + e.getMessage());  
 }catch (IOException e) {System.*out*.println("IO: " + e.getMessage());  
 }finally {if(aSocket != null) aSocket.close();}  
 }  
  
 public static void add(int number){  
 System.*out*.println("Adding: " + number + " to " + *sum*);  
 *sum* += number;  
 }  
}