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Datagram Application Protocol

Our application protocol is based around a single integer header value that describes the type of packet. This header field size is system dependent and should be made a fixed size. The data or arguments are passed in a single character array that follows the header..

```
/*  
 * Packet Protocol  
 *  
 * Types:  
 * 0 - bad type response  
 * 1 - echo query  
 * 2 - echo response  
 * 3 - time query  
 * 4 - time response  
 * 5 - ip query  
 * 6 - ip response  
 *  
 * Data: Optional for time service, required for echo and ip services.  
 *  
 */
```

A response is expected for each of the queries. There is no timeout or acknowledgement and thus the protocol is not reliable.

Here is an example implementation for c using a struct.

```
struct datagram{  
    int type;  
    char data[DATA_SIZE];  
};
```