Develop an elementary chatbot for any suitable customer interaction application.

```
#include <iostream>
#include <string>
#include <vector>
#include <ctime>
const int MAX_RESP = 3;
typedef std::vector<std::string> vstring;
vstring find_match(std::string input);
void copy(char *array[], vstring &v);
typedef struct {
  char *input;
  char *responses[MAX_RESP];
}record;
record KnowledgeBase[] = {
  {"WHAT IS YOUR NAME",
  {"MY NAME IS CHATTERBOT2.",
   "YOU CAN CALL ME CHATTERBOT2.",
   "WHY DO YOU WANT TO KNOW MY NAME?"}
  },
  {"HI",
  {"HI THERE!",
   "HOW ARE YOU?",
   "HI!"}
  },

  {"HOW ARE YOU",
  {"I'M DOING FINE!",
  "I'M DOING WELL AND YOU?",
  "WHY DO YOU WANT TO KNOW HOW AM I DOING?"}
  },
  {"WHO ARE YOU",
```

```
  {"I'M AN A.I PROGRAM.",
   "I THINK THAT YOU KNOW WHO I'M.",
   "WHY ARE YOU ASKING?"}
  },
  {"ARE YOU INTELLIGENT",
  {"YES,OFCORSE.",
   "WHAT DO YOU THINK?",
   "ACTUALY,I'M VERY INTELLIGENT!"}
  },
  {"ARE YOU REAL",
  {"DOES THAT QUESTION REALLY MATERS TO YOU?",
   "WHAT DO YOU MEAN BY THAT?",
   "I'M AS REAL AS I CAN BE."}
  }
};
size_t nKnowledgeBaseSize = sizeof(KnowledgeBase)/sizeof(KnowledgeBase[0]);
int main() {
  srand((unsigned) time(NULL));
  std::string sInput = "";
  std::string sResponse = "";
  while(1) {
     std::cout << ">";
     std::getline(std::cin, sInput);
     vstring responses = find_match(sInput);
     if(sInput == "BYE") {
        std::cout << "IT WAS NICE TALKING TO YOU USER, SEE YOU NEXTTIME!" <<std::endl;
        break;
     }
     else if(responses.size() == 0)  {
        std::cout << "I'M NOT SURE IF I  UNDERSTAND WHAT YOU  ARE TALKINGABOUT."<< std::endl;
     }
```

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      else {
         int nSelection = rand()  % MAX_RESP;
         sResponse =   responses[nSelection]; std::cout << sResponse <<
std::endl;
      }
   }
   return 0;
}

// make a  search for the  user's input
// inside the database of the program
vstring find_match(std::string  input) {
   vstring result;
   for(int i = 0; i < nKnowledgeBaseSize;  ++i) {
      if(std::string(KnowledgeBase[i].input) == input) {
         copy(KnowledgeBase[i].responses, result);
         return result;
      }
   }
   return result;
}
 void copy(char  *array[], vstring &v) {
   for(int i = 0;  i < MAX_RESP; ++i) {
      v.push_back(array[i]);
   }
 }
```