PYTHON

TERMINOLOGY={

"FORCE":"A PUSH OR PULL EXERTED ON AN OBJECT",

"LOAD":"THE WEIGHT OR FORCE APPLIED TO A STRUCTURE OR MACHINE",

"STRESS":"THE INTERNAL RESISTANCE OF A MATERIAL UNDER STRESS",

"STRAIN":"THE DEFORMATION OF A MATERIAL UNDER STRESS"

"FRICTION":"THE RESISTANCE ENCOUNTERED WHEN ONE SURFACE MOVES OVER ANOTHER",

"TORQUE":"A TWISTING FORCE THAT CAUSES ROTATION",

"EFFICIENCY":"THE RATIO OF USEFUL OUTPUT TO TOTAL INPUT IN A SYSTEM",

"POWER":"THE RATE AT WHICH WORK IS DONE OR ENERGY IS TRANSFERRED",

"VELOCITY":"THE SPEED OF AN OBJECT IN A SPECIFIC DIRECTION",

"ACCELERATION":"THE RATE OF CHANGE OF VELOCITY OVER TIME",

"BEAM":"A HORIZONTAL STRUCTURAL ELEMENT THAT SUPPORTS LOADS",

"COLUMN":"A VERTICAL STRUCTURAL ELEMENT THAT CARRIES LOAD FROM ABOVE",

"FOUNDATION":"THE BASE OF A STRUCTURE THAT DISTRIBUTES WEIGHT TO THE GROUND",

"SLAB":"A FLAT, HORIZONTAL SURFACE IN A BUILDING, USUALLY MADE OF CONCRETE",

"CONCRETE":"A CONSTRACTION MATERIAL MADE OF CEMENT, SAND, GRAVEL, AND WATER",

"ABSCISSA":"THE FIRST COORDINATE OF AN ORDERED PAIR",

"MEAN":"THE SUM OF ALL THE DATA POINTS DIVIDED BY THE NUMBER OF DATA POINTS",

"MODE":"THE NUMMERICAL VALUE THAT OCCURS MOST OFTEN AS A DATA POINT",

"LIVE LOAD":"TEMPORARY LOADS ON A STRUCTURE, LIKE PEOPLE OR FUNITURE",

"DEAD LOAD":"THE WEIGHT OF A STUCTURE ITSELF, INCLUDING FIXED ELEMENTS",

"VOLTAGE":"THE ELECTRICAL POTENTIAL DIFFERENCE BETWEEN TWO POINTS",

"CURRENT":"THE FLOW OF ELECTRIC CHARGE IN A CIRCUIT",

"RESISTANCE":"OPPOSITION TO THE FLOW OF ELECTRIC CURRENT",

"CIRCUIT":"A CLOSED PATH THROUGH WHICH ELECTRICITY FLOWS",

"GEAR":"A ROTATING MACHINE WITH TEETH THAT TRANSMIT MOTION",

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"BEARING":"A COMPONENT THAT REDUCES FRICTION BETWEEN MOVING PARTS",

"TURBINE":"A MACHINE THAT CONVERTS ENERGY FROM FLUID MOTION INTO MECHANICAL ENERGY",

"PUMP":" A DEVICE THAT MOVES FLUID BY MECHANICAL ACTION",

"COMPRESSOR": "A MACHINE THAT INCREASES THE PRESSURE OF A GAS",

"ACTUATOR":"A DEVICE THAT CONVERTS ENERGY INTO MOTION, OFTEN USEND IN AUTOMOTION",

}

x = input("HI, I'M ENGINEERING DICTIONARY! WHAT WORD DO YOU WANT TO KNOW IN ENGINEERING TERMS?")

print(TERMINOLOGY[x])
```

C++

```
#include <iostream>

#include <string>

#include <map>


using namespace std;


int main() {

    map<string, string> TERMINOLOGY = {

        {"FORCE", "A PUSH OR PULL EXERTED ON AN OBJECT"},

        {"LOAD", "THE WEIGHT OR FORCE APPLIED TO A STRUCTURE OR MACHINE"},

        {"STRESS", "THE INTERNAL RESISTANCE OF A MATERIAL UNDER STRESS"},

        {"STRAIN", "THE DEFORMATION OF A MATERIAL UNDER STRESS"},

        {"FRICTION", "THE RESISTANCE ENCOUNTERED WHEN ONE SURFACE MOVES OVER ANOTHER"},

        {"TORQUE", "A TWISTING FORCE THAT CAUSES ROTATION"},

        {"EFFICIENCY", "THE RATIO OF USEFUL OUTPUT TO TOTAL INPUT IN A SYSTEM"},
```

```
    {"POWER", "THE RATE AT WHICH WORK IS DONE OR ENERGY IS TRANSFERRED"},

    {"VELOCITY", "THE SPEED OF AN OBJECT IN A SPECIFIC DIRECTION"},

    {"ACCELERATION", "THE RATE OF CHANGE OF VELOCITY OVER TIME"},

    {"BEAM", "A HORIZONTAL STRUCTURAL ELEMENT THAT SUPPORTS LOADS"},

    {"COLUMN", "A VERTICAL STRUCTURAL ELEMENT THAT CARRIES LOAD FROM ABOVE"},

    {"FOUNDATION", "THE BASE OF A STRUCTURE THAT DISTRIBUTES WEIGHT TO THE GROUND"},

    {"SLAB", "A FLAT, HORIZONTAL SURFACE IN A BUILDING, USUALLY MADE OF CONCRETE"},

    {"CONCRETE", "A CONSTRUCTION MATERIAL MADE OF CEMENT, SAND, GRAVEL, AND WATER"},

    {"ABSCISSA", "THE FIRST COORDINATE OF AN ORDERED PAIR"},

    {"MEAN", "THE SUM OF ALL THE DATA POINTS DIVIDED BY THE NUMBER OF DATA POINTS"},

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    {"GEAR", "A ROTATING MACHINE WITH TEETH THAT TRANSMIT MOTION"},

    {"BEARING", "A COMPONENT THAT REDUCES FRICTION BETWEEN MOVING PARTS"},

    {"TURBINE", "A MACHINE THAT CONVERTS ENERGY FROM FLUID MOTION INTO MECHANICAL ENERGY"},

    {"PUMP", "A DEVICE THAT MOVES FLUID BY MECHANICAL ACTION"},

    {"COMPRESSOR", "A MACHINE THAT INCREASES THE PRESSURE OF A GAS"},

    {"ACTUATOR", "A DEVICE THAT CONVERTS ENERGY INTO MOTION, OFTEN USED IN AUTOMATION"}

  };
```

```
    string x;
    cout << "HI, I'M ENGINEERING DICTIONARY! WHAT WORD DO YOU WANT TO KNOW IN
ENGINEERING TERMS? ";
    getline(cin, x);


    for (char &c : x) c = toupper(c);


    auto it = TERMINOLOGY.find(x);
    if (it != TERMINOLOGY.end()) {
        cout << it->second << endl;
    } else {
        cout << "Term not found in the dictionary." << endl;
    }


    return 0;
}
```