**TYPE CHECKING**

**BY**

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**CODE**

#include <bits/stdc++.h>S

using namespace std;

bool isReal(const string &datatype)

{

return datatype == "real";

}

void chkCompatible(string resultVar, string operand1, string operand2, unordered\_map<string, string> &varMap)

{

bool isR = isReal(varMap[operand1]) || isReal(varMap[operand2]);

if (isR && !isReal(varMap[resultVar]))

{

cout << resultVar << " should be of real type" << endl;

}

else

{

cout << "Correct" << endl;

}

}

int main()

{

int numVars;

cout << "Enter number of variables: ";

cin >> numVars;

unordered\_map<string, string> varMap;

for (int i = 0; i < numVars; ++i)

{

string varName, varType;

cout << "Enter variable name and datatype: ";

cin >> varName >> varType;

varMap[varName] = varType;

}

string expr;

cout << "Enter the expression: ";

cin >> expr;

string resultVar = expr.substr(0, 1);

string operand1 = expr.substr(2, 1);

string operand2 = expr.substr(4, 1);

chkCompatible(resultVar, operand1, operand2, varMap);

return 0;

}

**OUTPUT**

