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#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>

/*
Title: Earthquake Information Center
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Date: 02/27/2020
Description: The National Earthquake Information Center has asked you to
write a program implementing
the following decision table to characterize an earthquake based on its
Richter scale number.

*/

double earthquakeCatagory(richterNum);

int main(void)
{
    //variables
    double richterNum = 0.0;

    //getting input for earthquake
    printf("What was the Richter scale number for the earthquake?\n");
    scanf("%lf", &richterNum);

    //function for determening catagorization and damage caused
    earthquakeCatagory(richterNum);

    return(0);
}

//function for determening catagorization and damage caused
double earthquakeCatagory(double richterNum)
{
    if (richterNum < 5.0)
    {
        printf("Little or no damage.");
    }
    if (5.0 <= richterNum && richterNum < 5.5)
    {
        printf("Some damage.");
    }
    if (5.5 <= richterNum && richterNum < 6.5)
    {
        printf("Serious Damage: walls may crack or fail.");
    }
    if (6.5 <= richterNum && richterNum <= 7.5)
    {
        printf("Disaster: houses and building may collapse.");
    }
    if (richterNum > 7.5)
    {
        printf("Catastrophic: most buildings destroyed.");
    }
}

```

```
return(richterNum);
```

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}
```