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1: // Author: Wayne Buchner
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3: // Date: 03/04/2011
4: // Program: Median.pas
5: // Description: Calculate the Median value from an array
6:
7: program Median;
8:
9: uses SysUtils, math;
10:
11: function Median (const data: array of Integer):Double;
12: var
13:     dataLength : Integer;
14: begin
15:     dataLength := Floor(Length(data)/2);
16:
17:     if Length(data) Mod 2 = 0 then
18:     begin
19:         result := (data[dataLength-1] + data[dataLength])/2;
20:     end
21:     else
22:     begin
23:         result := data[dataLength];
24:     end;
25: end;
26:
27: procedure Main();
28: var
29:     i : Integer;
30:     data: array of Integer;
31: begin
32:     // change length of array to test here.
33:     SetLength(data,16);
34:     for i:= 0 to Length(data) do
35:     begin
36:         data[i] := i+1;
37:     end;
38:     WriteLn('Median is : ',Median(data):4:2);
39: end;
40:
41: begin
42:     Main();
43: end.
```