

```

1  #include <iostream>
2
3  using namespace std;
4
5  void zamien(int & r1, int & r2 ); //przekazanie parametrów przez referencje
6
7
8  int main()
9  {
10     double z = 10;
11     double & z1 = z; //referencja
12     double & z2 = z1;
13     cout << "z = " << z << " adres: " << &z << " rozmiar: " << sizeof(z) << endl;
14     cout << "z1 = " << z1 << " adres: " << &z1 << " rozmiar: " << sizeof(z1) << endl;
15     cout << "z2 = " << z2 << " adres: " << &z2 << " rozmiar: " << sizeof(z2) << endl;
16     z1++;
17     cout << "wykonano: z1++;" << endl;
18     cout << "z = " << z << endl;
19     cout << "z1 = " << z1 << endl;
20     cout << "z2 = " << z2 << endl;
21     z2++;
22     cout << "wykonano: z2++;" << endl;
23     cout << "z = " << z << endl;
24     cout << "z1 = " << z1 << endl;
25     cout << "z2 = " << z2 << endl << endl;
26
27     int x=0, y=1;
28     cout << "x = " << x << " y = " << y << endl;
29     zamien(x,y);
30     cout << "wykonano: zamien(x,y);" << endl;
31     cout << "x = " << x << " y = " << y << endl;
32     return 0;
33 }
34
35 void zamien(int & r1, int & r2 )
36 {
37     int memo = r1;
38     r1 = r2;
39     r2 = memo;
40 }
41 /*
42 -----
43
44 z = 10 adres: 0x28ff00 rozmiar: 8
45 z1 = 10 adres: 0x28ff00 rozmiar: 8
46 z2 = 10 adres: 0x28ff00 rozmiar: 8
47 wykonano: z1++;
48 z = 11
49 z1 = 11
50 z2 = 11
51 wykonano: z2++;
52 z = 12
53 z1 = 12
54 z2 = 12
55
56 x = 0 y = 1
57 wykonano: zamien(x,y);
58 x = 1 y = 0
59
60 -----
61 */
62

```