

From Type	Promoted To Type	Example
bool	int	true + 1 → 2
char	int	'A' + 1 → 66
signed char	int	(signed char)5 + 1 → 6
unsigned char	int	(unsigned char)200 + 50 → 250
short	int	(short)5 + 1 → 6
unsigned short	int (or unsigned int if bigger range needed)	(unsigned short)60000 + 1 → 60001
int	long / long long / float / double (depending on context)	int(5) + double(2.5) → double(7.5)
unsigned int	long / unsigned long / float / double (depending on context)	unsigned int(10) + double(2.5) → double(12.5)
long	long long / float / double	
unsigned long	unsigned long long / float / double	
float	double	float(3.2f) + double(2.5) → double(5.7)
double	long double	double(3.2) + long double(2.5) → long double(5.7)

Evaluate following formula

$$z = \frac{x^{\frac{a}{b}} + y^{\frac{b}{a}}}{xy}$$

```
#include <iostream>
#include <cmath>
using namespace std;
int main ()
{
    const int a = 2 , b = 3;
    int x , y;
    double z;
    cin>>x>>y;
    z= (pow(x,static_cast<double>(a)/b) + pow(y,static_cast<double>(b)/a))/(x*y); // Explicit casting
    cout<<z<<endl;
    return 0;
}
```