PFI additional topics for cout

- We have learned how to use cout so our program could output the values of variables and produce needed output. Do you remember the include file needed?
- We may specify or change how cout produces the output. To do that we need to add or include the following:

    `#include<iomanip>`

- `setw(10):10 character as the field width`
- `setprecision(10):decimal precision is 10`
- `fixed: fixed point notation for double`
- `scientific: scientific notation for double`
- `hex: base 16 or hexadecimal format`

Examples and Combinations

```cpp
#include <iostream>
#include <iomanip>
using namespace std;
int main()
{
    int n = 10;
    int m = 3;
    double x = (double) n / m;
    cout << n << " " << m << " " << x << endl;
    cout << setw(20) << n << setw(20) << m << setw(20) << x << endl;
    cout << setprecision(15);
    cout << setw(20) << n << setw(20) << m << setw(20) << x << endl;
    cout << hex;
    cout << setw(20) << n << setw(20) << m << setw(20) << x << endl;
    cout << scientific;
    cout << setw(20) << n << setw(20) << m << setw(25) << x << endl;
    x = (double) n *100 / m;
    cout << setw(20) << n << setw(20) << m << setw(25) << x << endl;
    return 0 ;
}
```