

Exam 1 Programs

Program 1.

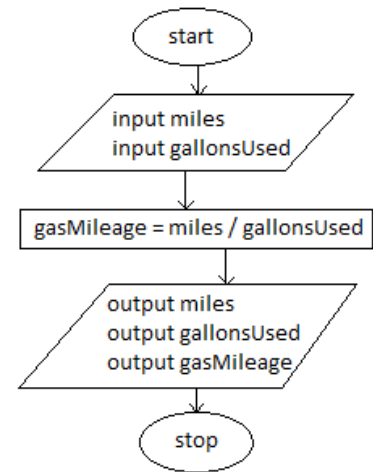
1. start

input miles
input gallonsUsed

$\text{gasMileage} = \text{miles} / \text{gallonsUsed}$

output miles
output gallonsUsed
output gasMileage

stop



```
gram 1.cpp x
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      double MilesDriven;
6      double GallonsUsed;
7      double GasMileage;
8
9      cout << "Enter miles driven this week: ";
10     cin >> MilesDriven;
11     cout << "Enter gallons used this week: ";
12     cin >> GallonsUsed;
13
14     GasMileage = MilesDriven / GallonsUsed;
15
16     cout << endl;
17     cout << "Miles driven: " << MilesDriven << endl;
18     cout << "Gallons used: " << GallonsUsed << endl;
19     cout << "Miles per gallon: " << GasMileage << endl << endl;
20
21     cout << "Code by Jacob Smetana" << endl;
22
23     return 0;
24 }
25
```

The screenshot shows the execution of the program. The user enters 100 for miles and 5 for gallons. The program outputs the calculated gas mileage of 20. The execution time is 3.445 seconds.

```
"C:\Users\Nii-san\Desktop\prog fund 1\Exam 1\Program 1.exe"
Enter miles driven this week: 100
Enter gallons used this week: 5

Miles driven: 100
Gallons used: 5
Miles per gallon: 20

Code by Jacob Smetana

Process returned 0 (0x0)   execution time : 3.445 s
Press any key to continue.
```

Program 2.

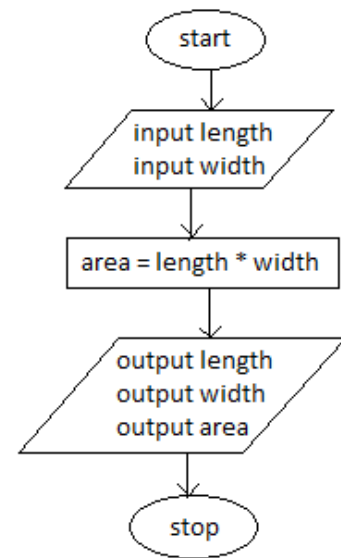
2. start

input length
input width

area = length * width

output length
output width
output area

stop



```
gram 2.cpp x
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      double Length;
6      double Width;
7      double SquareFootage;
8
9      cout << "Enter length of floor in feet: ";
10     cin >> Length;
11     cout << "Enter width of floor in feet: ";
12     cin >> Width;
13
14     SquareFootage = Length * Width;
15
16     cout << endl;
17     cout << "Length of floor: ";
18     cout << Length << " ft" << endl;
19     cout << "Width of floor: ";
20     cout << Width << " ft" << endl;
21     cout << "Area of floor: ";
22     cout << SquareFootage << " square ft";
23     cout << endl << endl;
24
25     cout << "Code by Jacob Smetana" << endl;
26
27     return 0;
28 }
29
```

"C:\Users\Nii-san\Desktop\prog fund 1\Exam 1\Program 2.exe"

```
Enter length of floor in feet: 13
Enter width of floor in feet: 10

Length of floor: 13 ft
Width of floor: 10 ft
Area of floor: 130 square ft

Code by Jacob Smetana

Process returned 0 (0x0)   execution time : 4.037 s
Press any key to continue.
```