
1- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 7;
    cout << x / 3 << endl;
    return 0;
}
```

Solution

```
2
```

2- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int a = 15, b = 4;
    float result = a / b;
    cout << result << endl;
    return 0;
}
```

Solution

```
3
```

3- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 10, y = 3;
    float z = x / (float)y;
    cout << z << endl;
    return 0;
}
```

Solution

```
3.33333
```

4- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 8;
    cout << x / 2 * 1.5 << endl;
    return 0;
}
```

Solution

```
6
```

5- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int a = 20, b = 6;
    cout << a % b << endl;
    return 0;
}
```

Solution

```
2
```

6- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 15;
    cout << (x > 10) << endl;
    return 0;
}
```

Solution

```
1
```

7- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 9;
    cout << (x < 5 || x >= 10) << endl;
    return 0;
}
```

Solution

```
0
```

8- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 16;
    cout << (x % 2 == 0 && x > 10) << endl;
    return 0;
}
```

Solution

```
1
```

9- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 7;
    cout << (x > 5 ? "Yes" : "No") << endl;
    return 0;
}
```

Solution

```
Yes
```

10- Trace the following program and predict the output.

```cpp
// www.gammal.tech

#include<iostream>
using namespace std;

int main() {
    int x = 5;
    int z = x * 100 / 2;
    cout << z / 100 << "." << z % 100 << endl;
    cout << (float)x / 2 << endl;
    printf("%d\n", z);
    cout << (int)(float)z / 2 << endl;
    return 0;
}
```

Solution

```
2.50
2.5
250
125
```
