

Example Practice-1

//What does this program print?

```
#include <iostream>
```

```
using namespace std;
```

```
#define foo1( a ) (a * a)
```

```
inline int foo2( int a ) { return (a * a); }
```

```
inline int goo1( int x ) { return foo1(foo2(x)); }
```

```
inline int goo2( int& x ) { return x = foo2(foo1(x)); }
```

```
inline int goo3( int& x, int y ) { return foo2(foo1(y + 1)); }
```

```
inline void goo4( int& x, int y ) { x = foo1(foo2(y + 1)); }
```

```
int main ( ) {
```

```
int i = 2, j = 1;
```

```
cout << "foo1 = " << foo1( 1 + 2 ) << "\n";
```

```
cout << "foo2 = " << foo2( 2 + 1 ) << "\n";
```

```
cout << "goo1 = " << goo1( i ) << "\n";
```

```
cout << "goo2 = " << goo2( j ) << "\n";
```

```
cout << "goo3 = " << goo3( i, j ) << "\n";
```

```
goo4( i, j );
```

```
cout << "i = " << i << "\nj = " << j << "\n";
```

```
return 0;
```

```
}
```

Solution:

fool1 = 5

fool2 = 9

gool1 = 16

gool2 = 1

gool3 = 9

i = 16

j = 1