

File.c

```
#include <delta.h>
```

```
#include <library.h>
```

```
int a = 5;
```

```
int const one = 1;
```

```
void main()
```

```
{
```

```
    int b = 30;
```

```
    int c = 75;
```

```
    int d;
```

```
    int array[1] = {7};
```

```
    d= a + b + c + one;
```

```
    array = new int [10]; //dynamically allocating size
```

```
    array[4] = d;
```

```
    array[8] = a;
```

```
    array[2] = c;
```

```
    a = delta( b , c );
```

```
    a = a + 15;
```

```
    if( a>0 )
```

```
    {
```

```
        a=1+glob;
```

```
    }
```

```
    else
```

```
    {
```

```
        c = factorial( b );
```

```
    }
```

```
    for( int f=0; f<4; f=f+1; )
```

```
    {
```

```
        a = a+1;
```

```
        d = b + c;
```

```
    }
```

```
    d = mult(a);
```

```
}
```

```
int factorial(int n)
```

```
{
```

```
    if(n<1)
```

```
        return 1;
```

```
    else
```

```
        return ( n * factorial(n-1) );
```

```
}
```

.....
delta.h

```
int glob = 5;  //glob is a global variable
```

```
int delta(int a, int b)
{
    if (a<b)
        return (b-a);
    else
        return (a-b);
}
```

.....
library.h

```
int mult(int a)
{
    return (a*a)
}
.....
```