Introducción a la computación

1er cuatrimestre de 2016

Conversor de Fahrenheit a Celsius

f2c_v0.cpp

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
   cout << "C = (5/9)(F-32)\n";
   return 0;
}
```

Conversor de Fahrenheit a Celsius

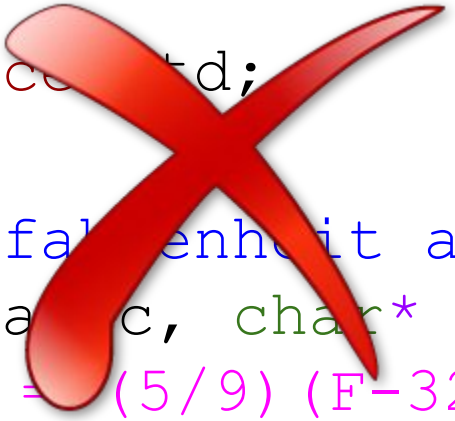
Comentarios

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
   cout << "C = (5/9)(F-32)\n";
   return 0;
}
```

Conversor de Fahrenheit a Celsius

Imprime la fórmula, pero no realiza ninguna conversión.

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
   cout << "C = (5/9)(F-32)\n";
   return 0;
}
```



Conversor de Fahrenheit a Celsius

f2c_v1.cpp

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32);
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Declaración de variables

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32);
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Literales

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32);
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Asignaciones

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32);
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

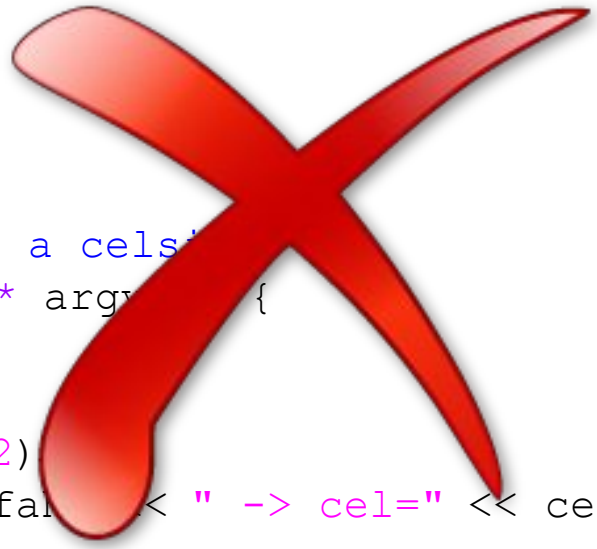
Impresión por pantalla

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32);
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Imprime "`far=80 -> cel=0`"

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a cels
int main(int argc, char* argv
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32)
    cout << "fahr=" << fa  < " -> cel=" << cel << "\n";
    return 0;
}
```



Conversor de Fahrenheit a Celsius

División de enteros

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5/9)*(fahr-32);
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

f2c_v2.cpp

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

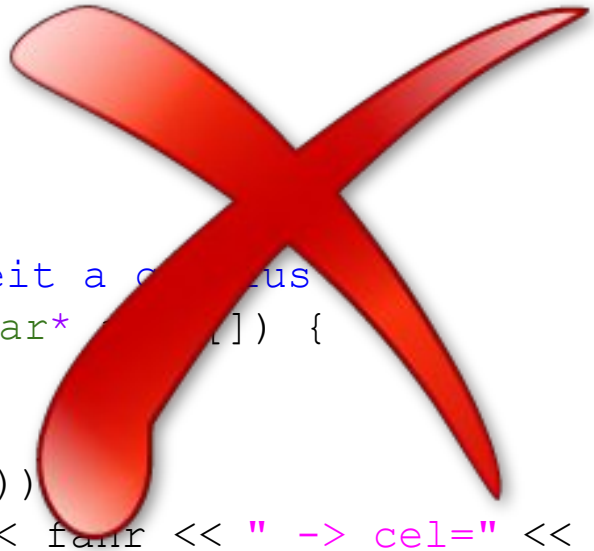
Precedencia en el cálculo

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    int fahr, cel;
    fahr = 80;
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Imprime "`far=80 -> cel=26`"

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a c    us
int main(int argc, char*     []) {
    int fahr, cel;
    fahr = 80;
    cel = (5*(fahr-32))
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```



Conversor de Fahrenheit a Celsius

c2f_v3.cpp

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    float fahr, cel;
    fahr = 80;
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

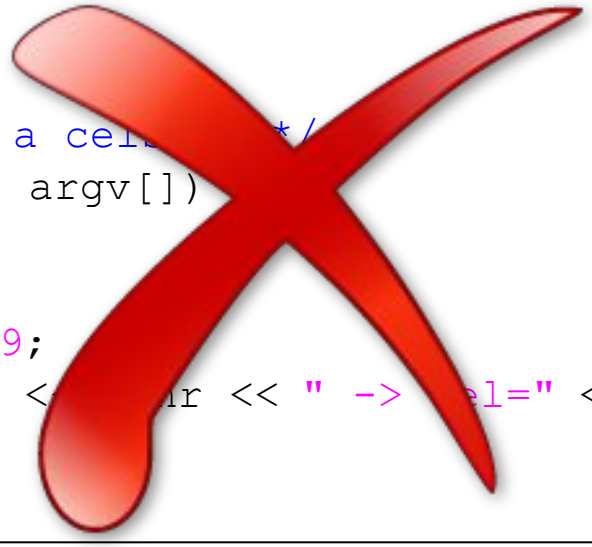
Variables de tipo float

```
#include <iostream>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    float fahr, cel;
    fahr = 80;
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Sólo convierte para fahr = 80

```
#include <iostream>

/* conversor fahrenheit a cel      */
int main(int argc, char* argv[])
    float fahr, cel;
    fahr = 80;
    cel = (5*(fahr-32))/9;
    std::cout << "fahr=" <<    hr << " ->    el=" << cel << "\n";
    return 0;
}
```



Conversor de Fahrenheit a Celsius

c2f_v4.cpp

```
#include <iostream>
#include <string>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    float fahr, cel;
    fahr = atof(argv[1]);
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Lectura de argumentos

```
#include <iostream>
#include <string>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    float fahr, cel;
    fahr = atof(argv[1]);
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Conversor de Fahrenheit a Celsius

Versión OK!

```
#include <iostream>
#include <string>

using namespace std;

/* conversor fahrenheit a celsius */
int main(int argc, char* argv[]) {
    float fahr, cel;
    fahr = atof(argv[1]);
    cel = (5*(fahr-32))/9;
    cout << "fahr=" << fahr << " -> cel=" << cel << "\n";
    return 0;
}
```

Preguntas