

The Evolution of a Programmer

High school/Jr. High

```
10 PRINT "HELLO WORLD"  
20 END
```

Senior year in college

```
(defun hello  
  (print  
    (cons 'HELLO (list  
      'WORLD))))
```

Seasoned pro

```
#include <stream.h>  
  
const int MAXLEN = 80;  
  
class outstring;  
class outstring {  
  private:  
  
    int size;  
    char str[MAXLEN];  
  
public:  
  outstring() { size=0; }  
  ~outstring() {size=0;}  
  void print();  
  void assign(char *chrs);  
};  
void outstring::print() {  
  int i;  
  for (i=0 ; i< size ; i++)  
    cout << str[i];  
  cout << "\n";  
}  
void outstring::assign(char *chrs) {  
  int i;  
  for (i=0; chrs[i] != '\0';i++)  
    str[i] = chrs[i];  
  size=i;  
}  
  
main (int argc, char **argv) {  
  outstring string;  
  
  string.assign("Hello World!");  
  string.print();  
}
```

Manager

```
/* George, I need a program to output a string  
   "Hello World!" */1
```

First year in college

```
program Hello(input, output);  
begin  
  writeln ('Hello world');  
end
```

New professional

```
#include <stdio.h>  
main (argc,argv)  
int argc;  
char **argv; {  
  printf ("Hello World!\n");  
}
```

¹ From <http://www.netfunny.com/rhf/jokes/new90/helowor.html> by Dennis Lou

Selecting a Programming Language Made Easy
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With such a large selection of programming languages it can be difficult to choose one for a particular project. Reading manuals to evaluate the languages is a time-consuming process. On the other hand, most people already have a fairly good idea of how various automobiles compare. So in order to assist those trying to choose a language, we have prepared a chart that matches programming languages with comparable automobiles.

Assembler	—A formula 1 race car. Very fast, but difficult to drive and expensive to maintain.
FORTTRAN II	—A model T Ford. Once it was king of the road.
FORTTRAN IV	—A Model A Ford
FORTTRAN 77	—A six-cylinder Ford Fairlane with standard transmission and no seatbelts.
COBOL	—A delivery van. It's bulky and ugly, but it does the work.
BASIC	—A secondhand Rambler with a rebuilt engine and patched upholstery. Your dad bought it for you to learn to drive. You'll ditch the car as soon as you can afford a new one.
PL/I	—A Cadillac convertible with automatic transmission, a two-tone paint job, white-wall tires, chrome exhaust pipes, and fuzzy dice hanging in the windshield.
C	—A black Firebird, the all-macho car. Comes with optional seatbelts (lint) and an optional fuzz buster (escape to assembler).
ALGOL-60	—An Austin mini. Boy, that's a small car!
Pascal	—A Volkswagen Beetle. It's small but sturdy. Was once popular with intellectuals.
Modula II	—A Volkswagen Rabbit with a trailer hitch.
ALGOL 68	—An Aston Martin. An impressive car, but not just anyone can drive it.
LISP	—An electric car. It's simple but slow. Seat belts are not available.
PROLOG/LUCID	—Prototype concept-cars.
Maple/ MACSYMA	—All-terrain vehicles.
FORTH	—A go-cart.
LOGO	—A kiddie's replica of a Rolls-Royce. Comes with a real engine and a working horn.
APL	—A double-decker bus. It takes rows and columns of passengers to the same place all at the same time. But, it drives only in reverse gear, and is instrumented in Greek.
Ada	—An army-green Mercedes-Benz staff car. Power steering, power brakes, and automatic transmission are all standard. No other colors or options are available. If it's good enough for the generals, it's good enough for you. Manufacturing delays due to difficulties in reading the design specifications are starting to clear up.