

# Commenting

Commenting involves placing **Human Readable Descriptions** inside of computer programs detailing what the **Code** is doing. Proper use of commenting can make code maintenance much easier, as well as helping make finding bugs faster. Further, commenting is very important when writing functions that other people will use. Remember, well documented code is as important as correctly working code.

## Commenting

All programs should be commented in such a manner as to easily describe (in English) the purpose of the code and any algorithms used to accomplish the purpose. A user should be able to utilize a previously written program (or function) without ever having to look at the code, simply by reading the comments.

Commenting is the "art" of describing what your program is going to do in "high level" English statements. Commenting is best done **before** actually writing the code for your program.

Comments are specially marked lines of text in the program that are **not evaluated**. There are usually two syntactic ways to comment. The first is called a *single line comment* and, as implied, only applies to a single line in the "source code" (the program). The second is called a *Block* comment and refers usually refers to a paragraph of text. A block comment has a start symbol and an end symbol and everything between is ignored by the computer.

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Single line:

```
# This is a single line comment
```

End of line:

```
My_score = your score + 1    #This comment says I always win
```

Block Comment:

```
=begin  
This is a multiline comment and can span as many lines as you like. But  
=begin and =end should come in the first line only.  
=end
```

## Where to Comment:

Comments should occur in the following places:

1. The top of any program file.

This is called the "**Header Comment**". It should include all the defining information about who wrote the code, and why, and when, and what it should do. (See Header Comment below)

2. Above every function.

This is called the function header and provides information about the purpose of this "sub-component" of the program.

When and if there is only one function in a file, the function header and file header comments should be merged into a single comment. (See Function Header below)

### 3. In line

Any "tricky" code where it is not immediately obvious what you are trying to accomplish, should have comments right above it or on the same line with it.

**Function Header:** This example goes at the top of any ruby program you make, changed to match your program.

```
# Application module for the Telit HE910 Driver application  *  
# @file cellular.c  
# @author Brad Smith  
# @date 9/5/2013  */  
#  
# Modifications:  
#
```

Commenting Assignment. The following code does something. Comment it.

Write function header here:

Add comments below. At least one single line comment, and one ending comment.

```
My_score = your_score + 10
```

```
If (my_score > your_score)  
    Puts "Oooh, I dominated you!!!"  
End
```