C LIBRARY FUNCTION - SYSTEM

Description
The C library function `int system(const char * command)` passes the command name or program name specified by `command` to the host environment to be executed by the command processor and returns after the command has been completed.

Declaration
Following is the declaration for system function.

```c
int system(const char *command)
```

Parameters
- `command` -- This is the C string containing the name of the requested variable.

Return Value
The value returned is -1 on error, and the return status of the command otherwise.

Example
The following example shows the usage of system function to list down all the files and directories in the current directory under unix machine.

```c
#include <stdio.h>
#include <string.h>

int main ()
{
    char command[50];
    strcpy(command, "ls -l");
    system(command);
    return(0);
}
```

Let us compile and run the above program that will produce the following result on my unix machine:

```
drwxr-xr-x 2 apache apache 4096 Aug 22 07:25 hsperfdata_apache
drwxr-xr-x 2 railo railo 4096 Aug 21 18:48 hsperfdata_railo
rw------- 1 apache apache 8 Aug 21 18:48 mod_mono_dashboard_XXGLOBAL_1
rw------- 1 apache apache 8 Aug 21 18:48 mod_mono_dashboard_asp_2
srwx------ 1 apache apache 0 Aug 22 05:28 mod_mono_server_asp
rw------- 1 apache apache 0 Aug 22 05:28 mod_mono_server_asp_1280495620
srwx------ 1 apache apache 0 Aug 21 18:48 mod_mono_server_global
```

The following example shows the usage of system function to list down all the files and directories in the current directory under windows machine.

```c
#include <stdio.h>
#include <string.h>

int main ()
{
    char command[50];
}
```
Let us compile and run the above program that will produce the following result on my windows machine:

```
a.txt
amit.doc
sachin
saurav
file.c
```