

1. Here is my changed signal_base.c.

```
#include <stdio.h>
#include <stdlib.h>
#include <signal.h>
#include <unistd.h>

void handler(int signum) // signal handler
{
    printf("Hello World!\n");
    //exit(1); // exit after printing
}

int main(int argc, char * argv[])
{
    while(1)
    {
        signal(SIGALRM,handler); // register handler to handle SIGALRM
        alarm(1); // schedule a SIGALRM for 1 second
        sleep(5);
        printf("Turing was right!\n");
    }

    return 0; // new exit
}
~
~
```

Here is the output to my code.

```
[amedel@odin:~/public_html/cms3600/lab02$ ./signal_base
Hello World!
Turing was right!
^C
```

2. Here is the code with the second handler for the SIGINT. And the second screen shot is the output of the code below, it counts the amount of loops and outputs when the user hits CTRL-C.

```
/*
 * CMPS 3600 OS
 * Medel Antonio
 * Lab 02
 *
 */

#include <stdio.h>
#include <stdlib.h>
#include <signal.h>
#include <unistd.h>

int loop = 0;

void handler(int signum) // signal handler
{
    printf("Hello World!\n");
    //exit(1); // exit after printing
}

void handler2(int sigint) // second handler
{
    printf("\nloop = %d \n", loop); // display loop count
    exit(1);
}

int main(int argc, char * argv[])
{
    signal(SIGINT, handler2);

    while(1)
    {
        signal(SIGALRM, handler); // register handler to handle SIGALARM
        alarm(1); // schedule a SIGALRM for 1 second
        sleep(5);
        printf("Turing was right!\n");
        loop++; // increment loop
    }

    return 0; // new exit
}
```

```
[amedel@odin:~/public_html/cms3600/lab02$ ./signal_base2
Hello World!
Turing was right!
^C
loop = 6
[amedel@odin:~/public_html/cms3600/lab02$ ./signal_base2
Hello World!
Turing was right!
Hello World!
Turing was right!
Hello World!
Turing was right!
^C
loop = 3
```