Basic Syntax in C
Lecture 1 Assignments

1. Write a program that prints the following text at the terminal.
    a. In C, lowercase letters are significant.
    b. main is where program execution begins.
    c. Opening and closing braces enclose program statements in a routine.
    d. All program statements must be terminated by a semicolon.

```c
#include <stdio.h>
int main()
{

    printf("In C, lowercase letters are significant.\n");
    printf("main is where program execution begins.\n");
    printf("Opening and closing braces enclose program statements in a routine.\n");
    printf("All program statements must be terminated by a semicolon.\n");

    return 0;
}
```

Save your code as assignment_lec1_c1.c

2. What output would you expect from the following program?

```c
#include <stdio.h>
     int main (void){
     printf ("Testing...");
     printf ("... 1");
     printf (".. 2");
     printf ("..3");
     printf ("\n");
     return 0;
}
```

Output: `Testing.....1...2..3`

3. Write a program that subtracts the value `15` from `87` and displays the result, together with an appropriate message, at the terminal.

```c
#include <stdio.h>
int main()
{
    int num1=87,num2=15;//variable declaration
    int sub=num1-num2;//subtraction
    printf("The difference of %d and %d is %d\n",num1,num2,sub);
    return 0;
}
```

Save your code as assignment_lec1_c2.c.

4. Identify the syntactic errors in the following program. Then type in and run the corrected program to ensure you have correctly identified all the mistakes.

```
#include <stdio.h>
int main(Void)
      INT sum;
      /* COMPUTE RESULT
      sum = 25 + 37 - 19
      /* DISPLAY RESULTS //
      printf ("The answer is %i\n" sum);
      return 0;
}
```

```c
#include <stdio.h>
int main(void){

//COMPUTE RESULT
int sum = 25 + 37 + 19;

//DISPLAY RESULTS
printf ("The answer is %d\n", sum);
return 0;
}
```

Save your code as assignment_lec4_c4.c

5. What output might you expect from the following program?

```
#include <stdio.h>
      int main (void){
      int answer, result;
      answer = 100.
      result = answer - 10;
      printf ("The result is %i\n", result + 5);
      return 0;
     }
```

Output: `The result is 95`

```
}
```