#### UNIVERSITY OF THE PHILIPPINES VISAYAS

College of Arts and Sciences Division of Physical Sciences and Mathematics

# CMSC 21 Fundamentals of Programming Second Semester AY 2021-2022

**ASSIGNMENT: Lecture 01** 

#### **Oath of Academic Integrity**

As a student at the University of the Philippines, we pledge to act ethically and uphold the value of honor and excellence.

We understand that suspected misconduct on this assignment will be reported to the appropriate office and if established, will result in disciplinary action in accordance with University rules, policies, and procedures.

Vito, Ma. Christina Kane B.

# 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.

#### Program:

```
#include <stdio.h>
int main (void){
printf ("a. In C, lowercase letters are significant.\n");
printf ("b. main is where program execution begins.\n");
printf ("c. Opening and closing braces enclose program statements in a routine\n");
printf ("d. All program statements must be terminated by a semicolon.");
return 0;
}
```

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

```
#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.

### Program:

```
#include <stdio.h>
int main(void) {
  int difference;
  // COMPUTE RESULT
  difference = 87 - 15;
  // DISPLAY RESULTS //
  printf ("The answer is %i\n", difference);
  return 0;
  }
}
```

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;
}
```

#### Errors:

```
#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;
}
```

#### Corrected Program:

```
#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;
  }
```

## Output:

## The answer is 43

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