

ENGG*1410: “Introductory Programming for Engineers”,
Assignment #2
Variable Declarations

Prof. Shawki Areibi
School of Engineering, University of Guelph
Fall 2021

Start Date: Week #2, Due Date: Week #3 (Friday, 5:00 PM) in Dropbox

1. Which of the following are invalid variable names? Why?

Int	char	6_05
Calloc	Xx	alpha_beta_routine
floating	_1312	z
ReInitialize	-	A\$

2. Which of the following are invalid constants? Why?

123.456	0x10.5	0X0G1
0001	0xFFFF	123L
0Xab05	0L	-597.25
123.5e2	.0001	+12
98.6F	98.7U	17777s
0996	-12E-12	07777
1234uL	1.2Fe-7	15,000
1.234L	197u	100U
0XABCDEFL	0xabcu	+123

3. Write a program that prints the following text.

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

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

```
int main (void)
{
    printf ("Testing ...");
    printf ("....1");
    printf ("...2");
    printf ("..3");
    printf ("\n");

    return 0;
}
```

5. Write a program that subtracts the value 14 from 87 and displays the result, together with an appropriate message, at the terminal.
6. 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.

```
int main (Void)
{
    INT sum;
    /* Comput Result
    sum = 25 + 37 -19

    /* Display Results//
    printf("The answer is %i\n" sum);

    return 0;
}
```

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

```
int main (void)
{
    int answer, result;

    answer =100;
    result = answer - 10;
    printf ("The result is %i\n", result + 5);

    return 0;
}
```