

PRINCIPLES OF PROGRAMMING LANGUAGES

Assignment I

Due Date: 1 October 2018

INSTRUCTIONS

Answer all the questions. Marks are given alongside the questions.

1. **(5 Marks)** What is the importance of *Language implementation time* binding? How is it different from *Compile time* binding? Illustrate using the following declaration (in C):

```
int a;
```

Write three language implementation time bindings in C. For any other language of your choice, find examples of language implementation time bindings.

2. **(7 Marks)** Identify three operations/operators that are evaluated left-to-right and some that are evaluated right-to-left. Demonstrate the correctness of your examples with short programs and explain your reasoning.
3. **(5 Marks)** Describe the use of *comma* in C. Is it an *operator* or a *separator*? Support your description with short programs.
4. **(3 Marks)** It is often felt that Pascal is a better language than C but C has been wildly successful while Pascal enjoyed only limited success. What are two major reasons for the spectacular success of C? Support your answer with reliable references from the WWW.