

**Issued Date :** Monday May 2, 2022

**Due Date :** Wednesday June 1, 2022

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### **Problem statement**

You are required to provide a research paper of approximately 20 pages (including table of contents, introduction, and conclusion) on a selected topic pertaining to the comparison of programming languages. You are allowed to select your own topic, with approval from the instructor. Some topic suggestions are listed below. Each paper must be done in a team of exactly 8 persons.

### **References**

You must provide the references (i.e. books, web sites, research papers, publications, ...) for all subjects mentioned in your paper text. Failure to provide good references will result in major grade deductions. Plagiarism will be thoroughly checked and any plagiarism will result in a failure grade.

### **Proposal**

By Wednesday May 11th, a short proposal (1-2 pages) must be submitted to the instructor in class. The proposal must describe the proposed topic, along with a projected structure of the paper briefly describing each section and its projected content, and a preliminary list of references.

### **Presentations**

The presentations will start during the week of May 30, and each team must select in advance the day and time for its presentation. The final presentation schedule will be listed on moodle when available.

### **Topics**

- Comparative study based on the course assignments.
  - Following the experience gained in the three programming assignments, write a paper describing what are your conclusions regarding the comparison of the programming languages used in your programming assignments. The paper should include one section for each assignment, describing each language used, and what are the conclusions derived from its completion in terms of comparing the programming languages used in the assignment.
  - Your paper should also provide a global description of each language in terms of paradigm, evaluation, main constructs, etc.
  - You should also explain the language constructs used in the implementation of each assignment and how those constructs differ for the programming languages.

### **Evaluation Criteria**

- Document 10%.
- Presentation 10%