

Write 100-150 words for *each* of the 12 topics below [a total of 1200-1800 words]. Use your **own words** (*do not copy-and-paste*) and **cite** sources that have you used **inside your paragraph text** (books, articles, web pages, etc). Mention one reference for each topic. In other words, your submission should contain at least twelve *different* references. The references can be either footnotes, or on a separate section at the end. Depending upon the type of source (web-pages / magazines, or books), each reference must have at least the following:

- Author(s), article title, URL address <sup>1</sup> / name of the magazine / . . . , and year, if the source is a web-page <sup>2</sup> / magazine article
- Author(s), book title, page number(s) and year, if the source is a book

If any of the above is not known, clearly mention “unknown author”, or “unknown date”, etc. in that place in the references, but *do not leave unspecified*.

**Example** Linus Torvalds, a young student at the University of Helsinki, Finland, had initially created an operating system called Linux as a hobby[1]. He was interested in an operating system called MINIX . . .

The C++ programming language was developed in the early 1980’s by Bjarne Stroustrup of AT&T Bell Laboratories. The purpose of this language is to overcome the limitations and peculiarities of the C programming language[2]. . . .

#### References

[1] (Unknown Author). “About the Linux Operating System”. <http://www.linux.org/info//>. 2006.

[2] Savitch, Walter. *Absolute C++*, Pearson Addison-Wesley, page 3, 2005.

**Submission Format** Submissions should be Microsoft Word documents / PDF files (no plain text files). If using OpenOffice or WordPerfect, convert to PDF files before submission. Ensure *one* file for all topics.

## Topics

1. Pioneers: describe their contributions to computing
  - a. Charles Babbage
  - b. Ada Lovelace
  - c. Alan Turing
2. Machines: describe their significance to computing
  - a. Analytical Engine
  - b. Atanasoff-Berry Computer (ABC)
  - c. ENIAC
3. Operating systems: describe their significance to computing
  - a. CTSS
  - b. QDOS
  - c. UNIX
4. Programming languages: describe their significance to computing
  - a. LISP
  - b. Prolog
  - c. Smalltalk

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<sup>1</sup>For web-pages with no known dates, state “unknown date”

<sup>2</sup>For web-pages with no known author(s), state “unknown author”