

Unit 1 Help Lecture

CSCI1800 Fall 2020
Dr. Aaron Sidney Wright
asw@dal.ca



DALHOUSIE
UNIVERSITY

Agenda

1. Reminder: What is Unit 1 about?
2. Topic: Founding of IBM
3. Assignment details
4. Your questions

Use these slides on your own: <https://g.aaronswright.com/>.

1. What is Unit 1 about?

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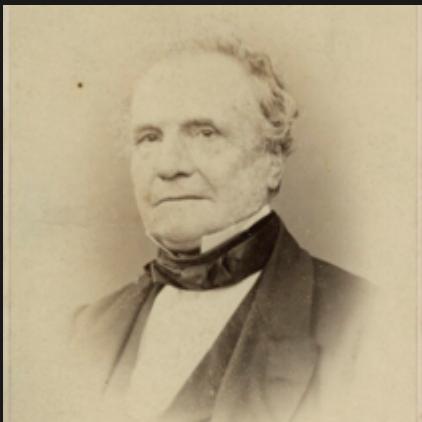
The prehistory of modern computing

1. What is Unit 1 about?

The prehistory of modern computing

The people, the machines, and the companies
that shaped computing before World War II

1. What is Unit 1 about?



Charles Babbage (born 1791 – died 1871), designed the "Difference Engine" and the "Analytical Engine," digital mechanical computing machines



Augusta Ada King, Countess of Lovelace (1815–1852) ([Science Museum](#))

1. What is Unit 1 about?



Augusta Ada King, Countess of Lovelace (1815–1852)

Here follows a repetition of Operations thirteen to twenty-three.

1. What is Unit 1 about?

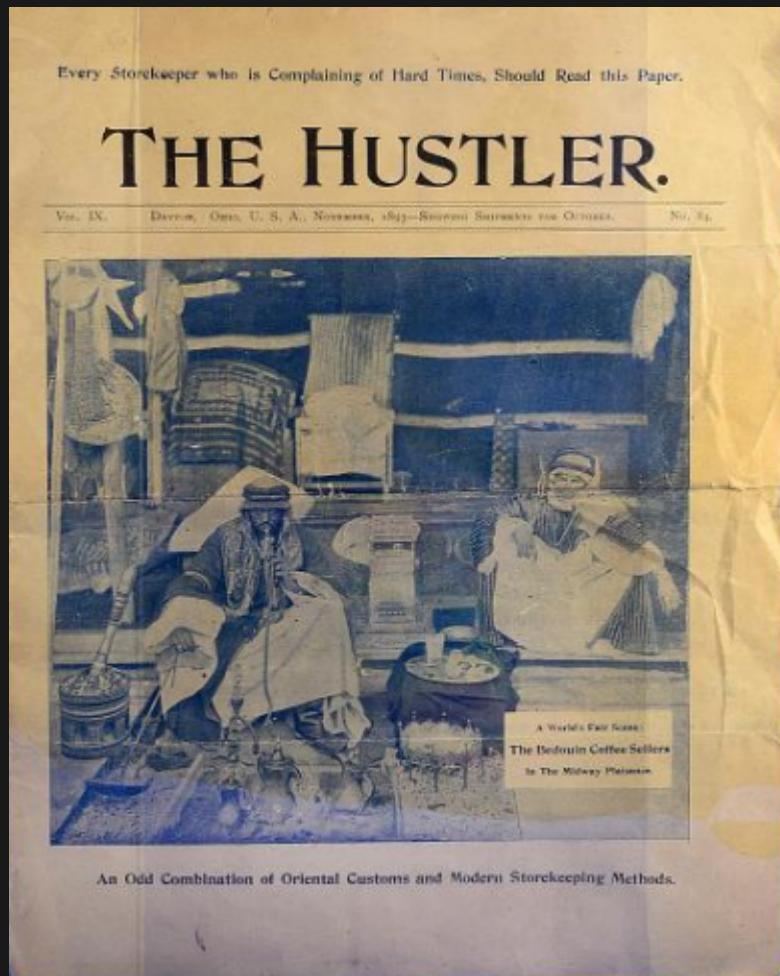
The first computer programmer (?)



Augusta Ada King, Countess of Lovelace (1815–1852)

Here follows a repetition of Operations thirteen to twenty-three.

1. What is Unit 1 about?



NCR's The Hustler (Smithsonian)



Thomas J Watson, Sr. (1874–1956), portrait by
Yousuf Karsh ([CHM](#))

1. Essay Questions

Each student must choose one essay topic from the list provided.
All essays must be based on the assigned readings.

1. The uses of computers, then and now
2. The role of governments
3. Connect to today's tech companies

Read the questions in
BrightSpace > Unit 1 > Welcome



Ada Lovelace Day is 13 October

2. Students' choice topics

What do you want to know? Tell Dr. Wright in Office Hours or Discussion Forum

Discussions List > View Topic

Ask Dr. Wright

[Start a New Thread](#) [Refresh](#) [Mark All Read](#) [More Actions](#)

[Subscribe to Topic](#) View: [Threaded](#)

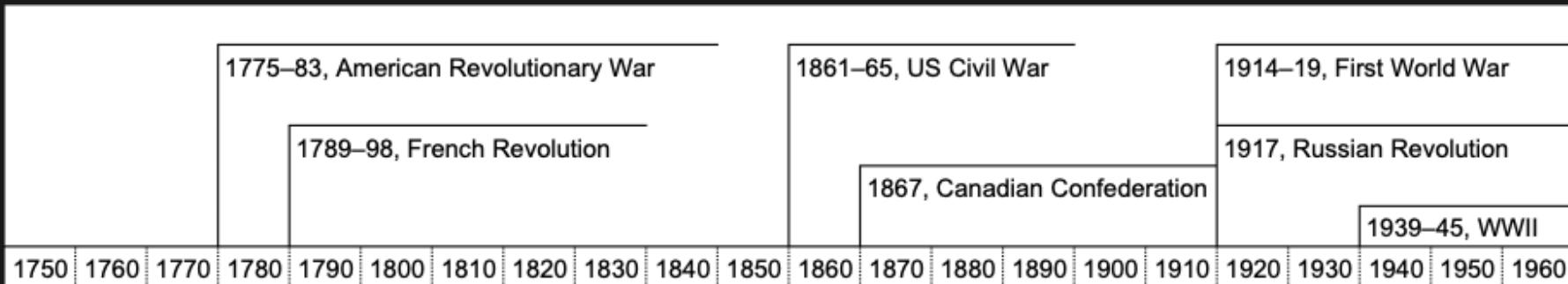
[Mark Read](#) [Mark Unread](#) [Delete](#) [Print](#)

<input type="checkbox"/>				Subject	Authored By
<input type="checkbox"/>				▼ You decide the lecture topics: What do you want to learn to Help with Unit 1?	Aaron Wright
<input type="checkbox"/>				You decide the lecture topics: What do you want to learn to Help with Unit 1?	Qiaodan Luo
<input type="checkbox"/>				► You decide the lecture topics: What do you want to learn to Help with Unit 1?	Hassaan Asif
<input type="checkbox"/>				You decide the lecture topics: What do you want to learn to Help with Unit 1?	Luke Veer

2. Students' choice topics

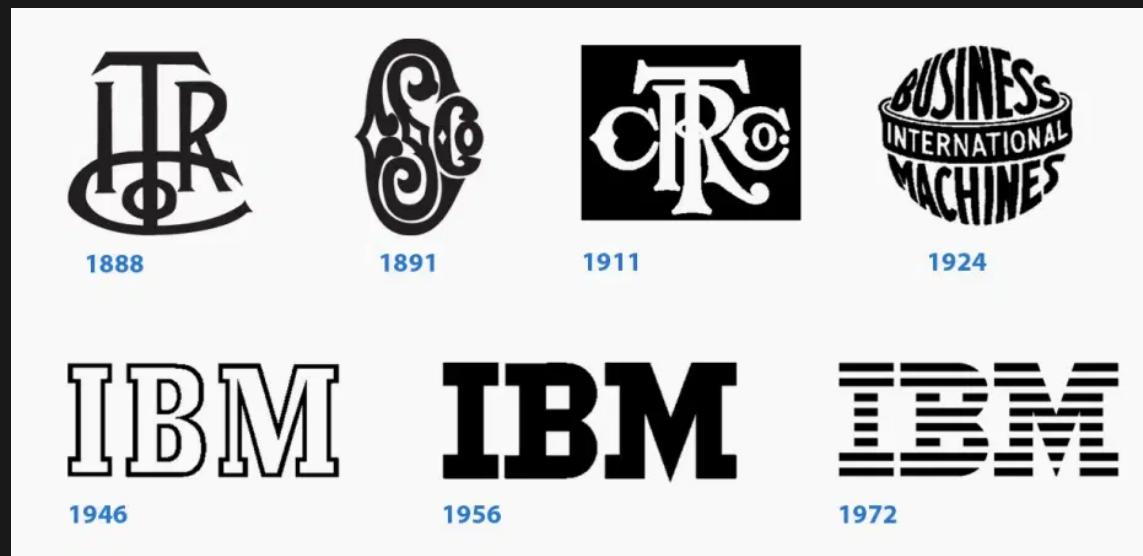
- Qiaodan: History of silicon valley
- Luke: More about the founding of IBM
- Essays and Assignment mechanics

2. Prehistory of IBM



2. Corporate History

- 1896 Hollerith incorporates the Tabulating Machine Company (TMC)
- 1911 TMC merges with Computing Scale Company and International Time Recording Company to form the Computing-Tabulating-Recording Company (CTR)
- 1924 CTR is renamed the International Business Machines Company, (IBM)



2. Herman Hollerith (1860-1929)

- 1875 Entered CCNY
- 1879 Graduated Columbia School of Mines, Engineering
- 1879-82 Joins US Census Bureau

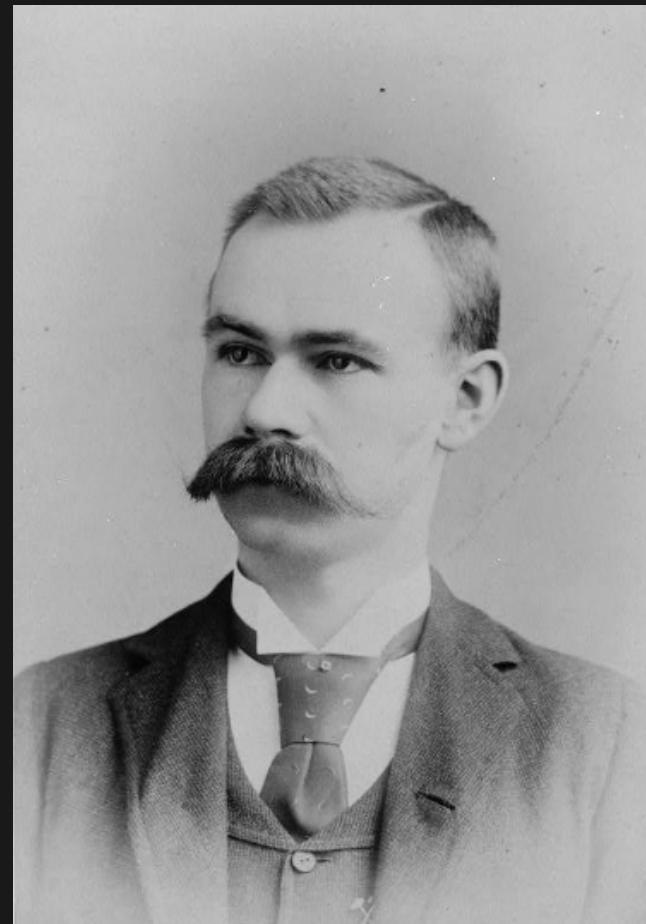
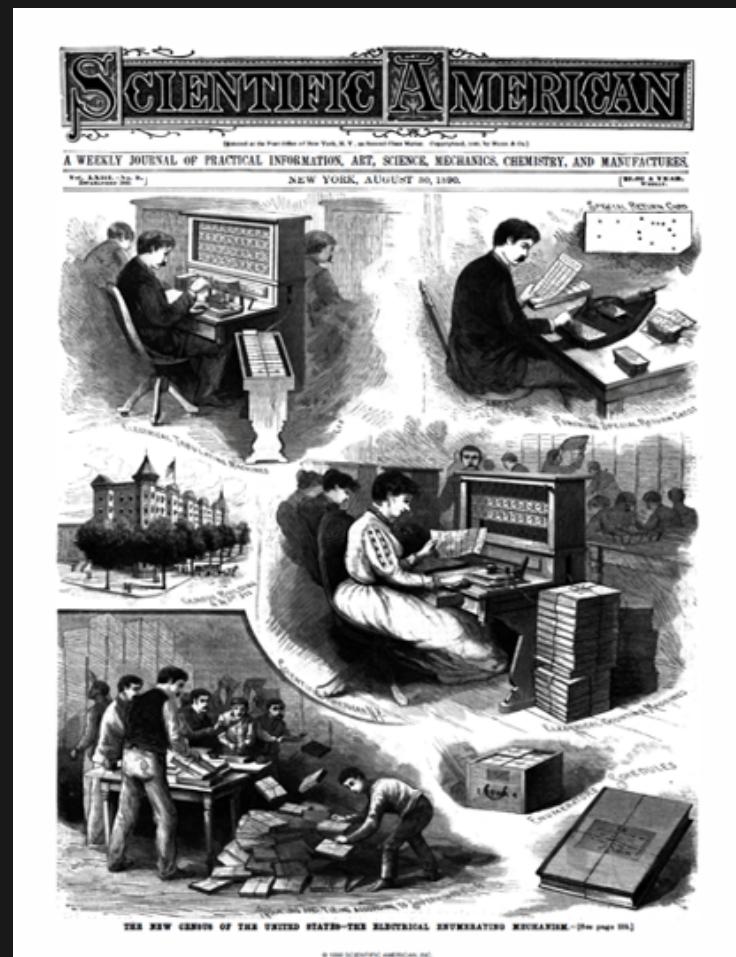


Photo By CM Bell, United States Library of Congress

2. Herman Hollerith

- Census Tabulating Machines
- Punch card technology
- Mechanized *tabulation*

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Scientific American, 1890

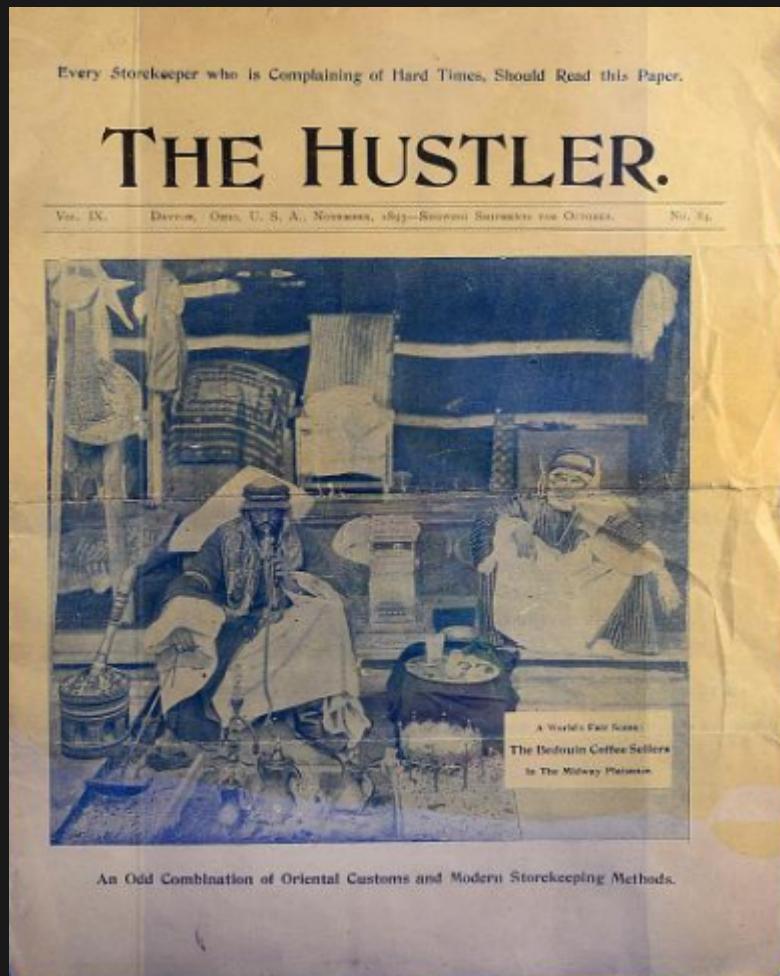
Hollerith Machine Operation

Computer Perspective (1972)



US Journalist on Hollerith machine: "It is used for compiling labor costs, efficiency records, distribution of sales, internal requisitions for supplies and materials, production statistics, day and piece work. It is used for analyzing risks in life, fire and casualty insurance, for plant expenditures and sales of service, by public service corporations...."

2. Thomas Watson, Sr. (1874-1956)



NCR's The Hustler (Smithsonian)



Thomas J. Watson, Sr. (1874–1956), portrait by
Yousuf Karsh ([CHM](#))

2. NCR Culture



National Cash Register Company, Dayton, Ohio.: School for Sales Agents ([Harvard](#))

2. Takeaways: History and Today

- Goals?
- Culture?
- Customers and customer interaction
- Business models?
- Impacts?
- Your suggestion...?



IBM's motto ([Smithsonian](#))

3. Essays and Assignments

Available on BrightSpace > Course Syllabus

CSCI1800_Fall2020 : Schedule

Unit	Week	Date	Due Dates	Tutorial	Tutorial Activity	Notes
<u>Unit 0. Introduction</u>	Week1	Mon., Sep. 7,		Week1 Tutorial	None	LabourDay
		Tue., Sep. 8,				
		Wed., Sep. 9,				
		Thu., Sep. 10,	Open Office Hour, 10AM Atlantic and 4PM Atlantic			
		Fri., Sep. 11,	Introductory post			
	Week2	Sat., Sep. 12,		Week2 Tutorial	Synchronous Practice Session: active reading / note taking	
		Sun., Sep. 13,				
		Mon., Sep. 14,	Team Charter, due 5pm Atlantic			
		Tue., Sep. 15,				
		Wed., Sep. 16,	Team Plan Unit 1, due 5pm Atlantic			
		Thu., Sep. 17,	Open Office Hour, 10AM Atlantic and 4PM Atlantic			
		Fri., Sep. 18,				
		Sat., Sep. 19,				
		Sun., Sep. 20,				
		Mon., Sep. 21,	Synchronous help lecture, 4:05-5:25 Atlantic			

Schedule

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3. Essay Structure. Resources

BSpace > Content > Course Docs

- Team Notes Template
- Cover Essay Template
- Writing Outline
- 750-word Essay Rubric (Syllabus)

In-person / virtual

- Tutorial Problem Solving sessions
- Dr. Wright's Office Hours
- Free Appointment at the Writing Centre

3. Paragraph Structure

Topic Sentence

Evidence 1

Evidence 2

Evidence N

Concluding Sentence

3. Essay Structure

Introductory Paragraph with
Thesis statement

Body Paragraph 1

Body Paragraph 2

Body Paragraph N

Concluding Paragraph

3. Demo Draft

Discussions > Ask a Question > Demo Essay Draft and Peer Review

[Reply](#) [Edit Post](#) [More Actions](#)

Demo Draft: Government was the Driving Factor in the Creation of the Computer

 [Aaron Wright](#) Sep 18, 2020 5:06 PM

[★ Subscribe](#)

[NOTE: For this sample essay, I adapted an Essay Topic from Unit 1 on “The role of governments.” The Unit 1 Topic is about the prehistory of computing, and uses material from Chapters 1, 2, and 3 of Campbell-Kelly et al. (2014). The key instruction is “In an essay of between 675 and 825 words, assess whether governments were the most important factor in the nineteenth century history of computing.” This sample essay applies that question to the next time period, the invention of computers in the 1940s and 50s. The key instruction for this demo essay is “In an essay of between 675 and 825 words, assess whether governments were the most important factor in the creation of the computer.” I use material from Chapters 4 and 5 of Campbell-Kelly et al. (2014).]

NOTE: This essay is 812 words long (including all the text, not the title or references).]

Government was the Driving Factor in the Creation of the Computer

Dr. Aaron S. Wright
18 September 2020

Popular culture portrays the big advances in computing technology as the result of charismatic geniuses, like Alan Turing. But the real story of the invention of modern computers shows that advances were created by governments—giant, impersonal, institutions. Governments provided the problems computers were meant to solve. Governments provided the

3. Demo Draft Highlights

- **Argument:** clearly answers question
- **Evidence:** Uses course readings
 - Summary (100% own words)
 - Paraphrase (100% own words)
 - Quotations (“borrowed words” **in quotes**)
- **Structure:** explicit organization

Reply Edit Post More Actions ▾

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3. Where to submit?

The screenshot shows a course page for "CSCI1800 - Computing & Society". The top navigation bar includes links for "Course Home", "Content", "Discussions", "Assessments", and "My". A dropdown menu is open under "Assessments", listing "Assignments", "Quizzes", and "Grades". The background features a decorative patterned banner.

3. Where to submit?



- Assessments > Assignments > Thesis Development Unit 1

3. Where to submit?



- Assessments > Assignments > Thesis Development Unit 1
- **Draft** essay, paste in T# Discussions > Unit 1: Post your Drafts and Peer Comments

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- Assessments > Assignments > Thesis Development Unit 1
- **Draft essay**, paste in T# Discussions > Unit 1: Post your Drafts and Peer Comments
- **Peer Comments** post reply in T# Discussions > Unit 1: Post your Drafts and Peer Comments

3. Where to submit?



- Assessments > Assignments > Thesis Development Unit 1
- **Draft essay**, paste in T# Discussions > Unit 1: Post your Drafts and Peer Comments
- **Peer Comments** post reply in T# Discussions > Unit 1: Post your Drafts and Peer Comments
- Submit **Cover Letter and Final Essay** in Assignments > Unit 1 Final Essay

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1. Reminder: What is Unit 1 about?
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Use these slides on your own: <https://g.aaronswright.com/>.

Thank you for watching!

Dr. Aaron Sidney Wright

CSCI1800

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