AP Computer Science Principles
Summer Assignment 2018

Future AP Computer Science Principles Student,

Welcome to AP Computer Science Principles! To ensure the best start for everyone next year, you will have to complete work this summer. ***This assignment is to be printed out and completed by hand. This assignment is due and will be collected on your first day of class.*** It will be assessed as a summative grade.

Computing and computing technologies have created what is sometimes referred to as a "digital explosion". With the growing development of computing technologies, more and more digital data is being produced at a pace so rapid that is almost seems to be feeding off itself. This concept raises some serious questions. Some of this data is public. Some of it is private, or at least we like to think it is. Where do we draw the line? Or can one be drawn? Who ultimately "owns" the data and the information that can be drawn from it? What are the security and privacy issues involving the data? These issues have an impact on all our lives. Some of the impacts are beneficial, and yet some of them can be harmful. We will reflect on these concepts and issues throughout this class.

One way we will be addressing these issues in this course is by reading and discussing **Blown to Bits: Your Life, Liberty, and Happiness After the Digital Explosion**. This book is available without charge online. You can access the website through this link and download the file in pdf format. Or type this in your browser http://www.niemanlab.org/pdfs/blowntobits.pdf.

You will need to read the entire book for the summer assignment. Note that throughout the year, you will be given quizzes on the vocabulary and other content from this book. For this reason, while you are reading, we require you to complete the attached vocabulary list for Chapters 1 – 6 and the double entry journal sheet for each chapter of the book.

We highly recommend that you spread out the reading over the summer. Pace yourself. Please do not try to complete it all in the final week of August. AP CS-Principles concepts take time to process and grasp at a level necessary for success in this class. Remember, *AP Computer Science Principles is a college level course.* Taking a college level course in high school is not be taken lightly. It requires dedication and is a great investment in your education so prepare yourself and arrive ready to learn.

Have a great summer and enjoy AP Computer Science Principles!

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Double-Entry Journal (Chapter 1)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Chapter 1 Vocabulary

Term	Definition
bit	
blacklist	
character	
cyberspace	
data center	
data	
data network	
disk drive	
intellectual property	
Moore's Law	
network	
processor	
social networking	
whitelist	

Double-Entry Journal (Chapter 2)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Chapter 2 Vocabulary

Term	Definition
ad hoc	
database	
data aggregation	
data mining	
data repository	
data sources	
digital detritus	
dossier	
EDR	
Encode	
Encryption	
IP address	
Metadata	
Query	
RFID	

Double-Entry Journal (Chapter 3)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Chapter 3 Vocabulary

Term	Definition
algorithm	
analog	
ASCII	
cloud computing	
cryptography	
digital	
digital signal processing	
download	
lossless compression	
lossy compression	
megabyte	
megapixels	
modeling	
OCR	
pixels	
raster	

Double-Entry Journal (Chapter 4)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Chapter 4 Vocabulary

Term	Definition
background	
binary	
bot	
cache	
firewall	
foreground	
HTML	
URL	

Double-Entry Journal (Chapter 5)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Chapter 5 Vocabulary

Term	Definition
AES	
certification authority	
ciphertext	
DES	
decryption	
encryption	
packet	
plain text	
router	

Double-Entry Journal (Chapter 6)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Chapter 6 Vocabulary

Term	Definition
centralized systems	
commons	
DRAM	
DRM	
flooding	
gigabyte	
peer to peer architecture	
piracy	
sealed storage	
TPM	

Double-Entry Journal (Chapter 7)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text

Double-Entry Journal (Chapter 8)

Directions: As you read, write five ideas from this chapter that you believe are critically important. You can quote the authors or summarize them. Include the page number. Then write your reaction to the idea.

Page #	Quote or Summary from the Text	My Reaction to the Text