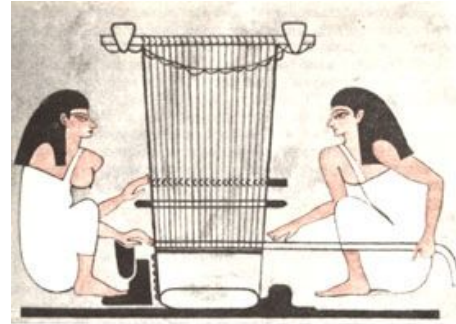




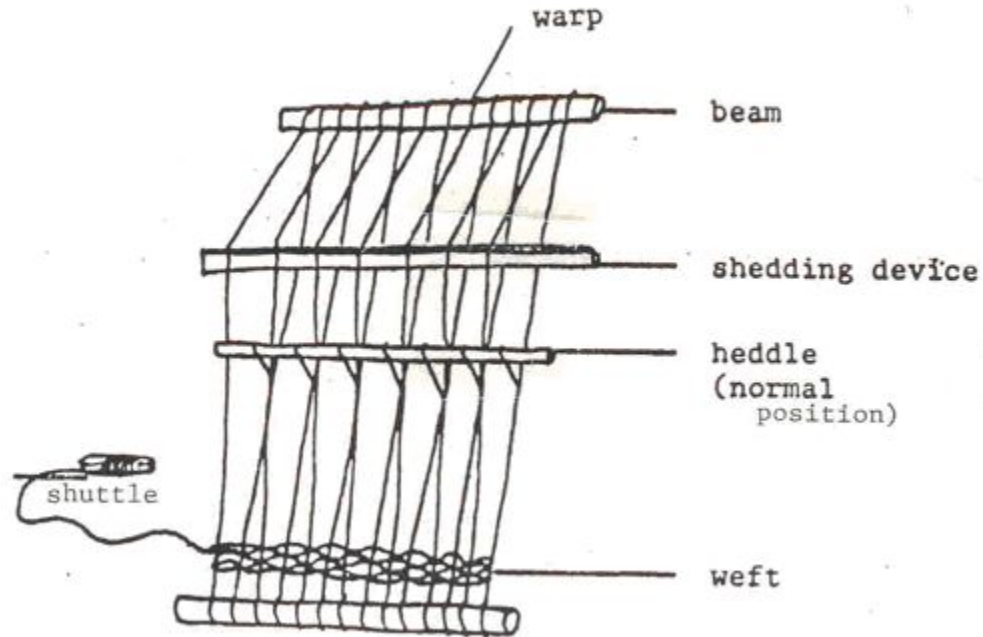
Weaving

Brief history of Weaving

- ~7000 BCE, earliest woven fabric found in Anatolia (Turkey)
- Also appears in China, Peru and Egypt



Weaving Terminology





carpet loom



backstrap weaving

WEAVING TECHNIQUES

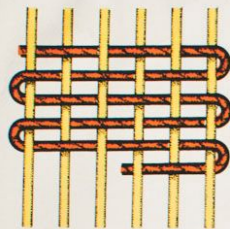


Fig. A Tabby Weaving

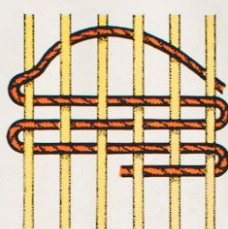


Fig. B Bubbling

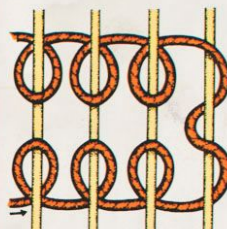


Fig. C Egyptian Knot

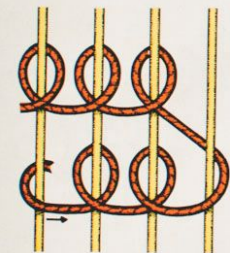


Fig. D Soumak

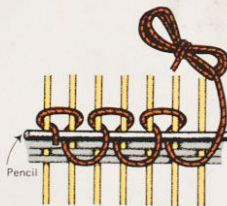


Fig. E Rya on a Pencil

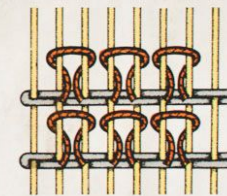


Fig. F Rya (Shag)

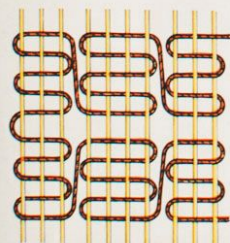


Fig. G Spanish Lace

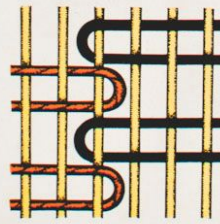


Fig. H Interlocking

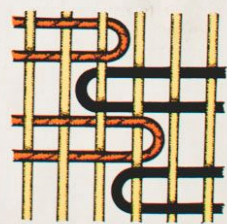


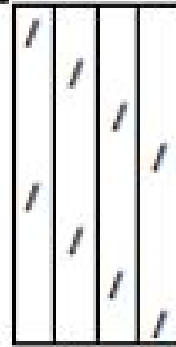
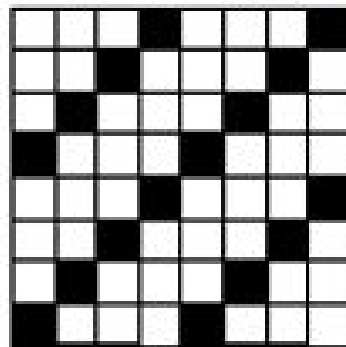
Fig. I Diagonal Interlocking



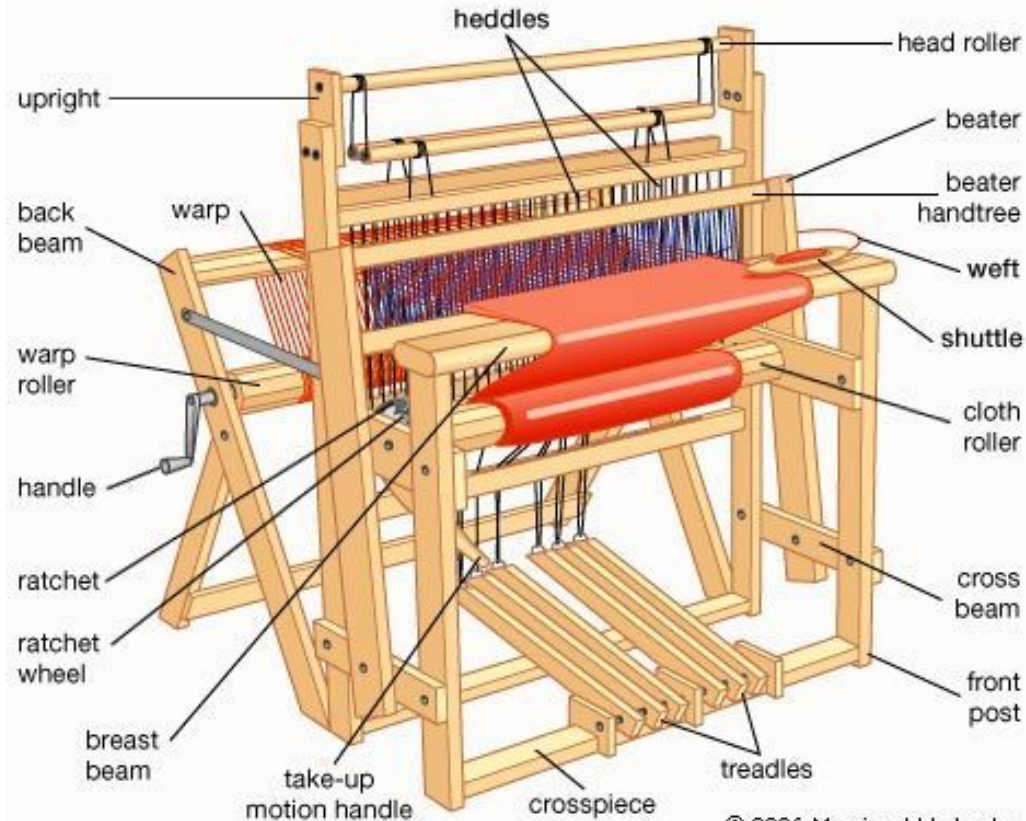
1. A basic draft

4		4	
3		3	
2		2	
1		1	

1	2	3	4
			4
		3	
1	2		

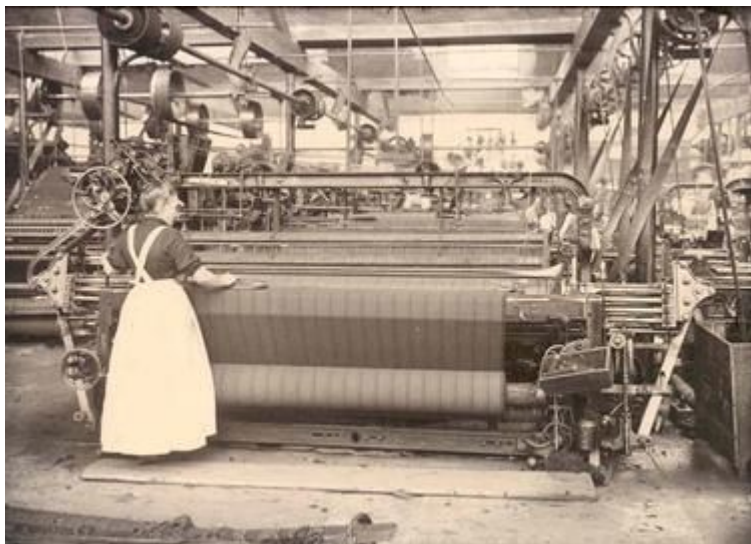


 = the "you are here" square

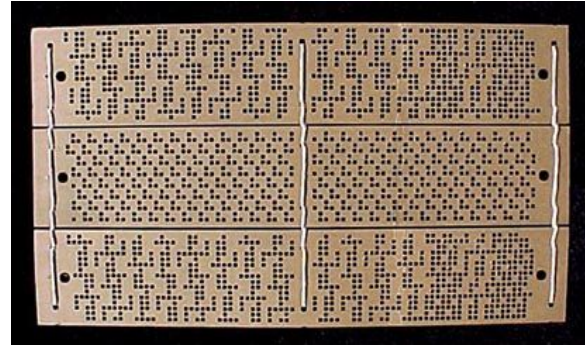
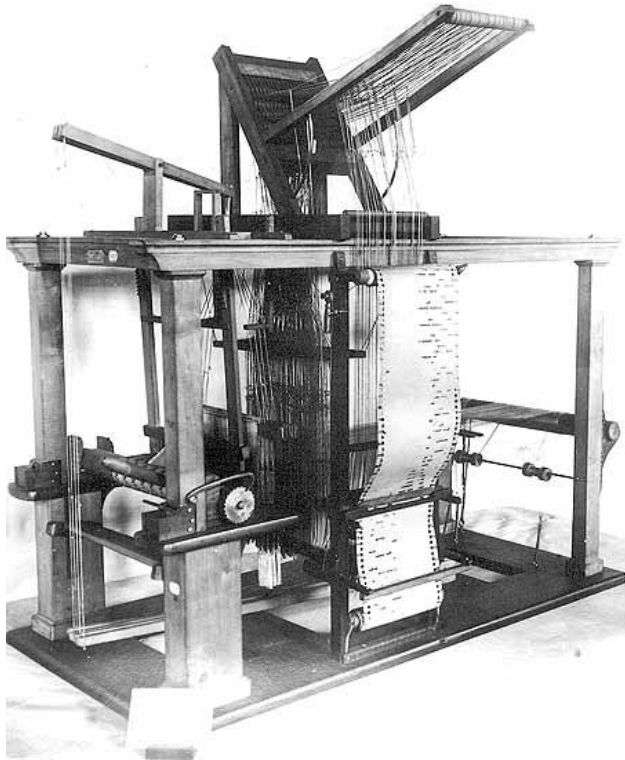


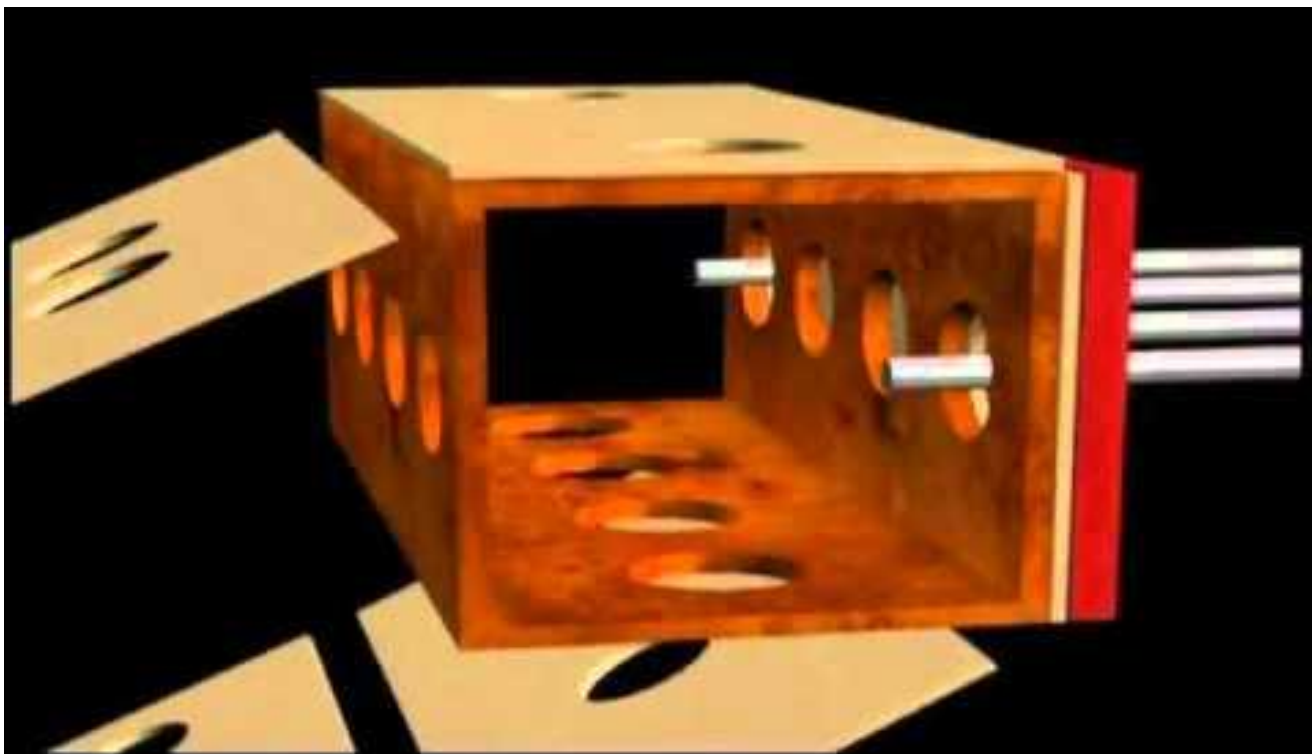






Jacquard Loom - 1803

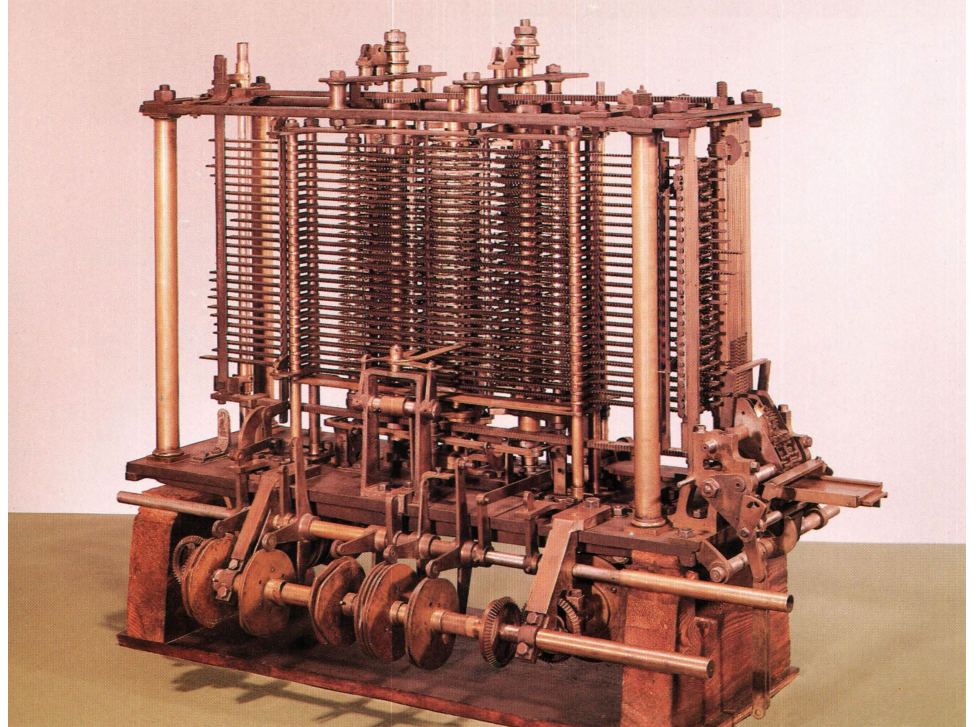


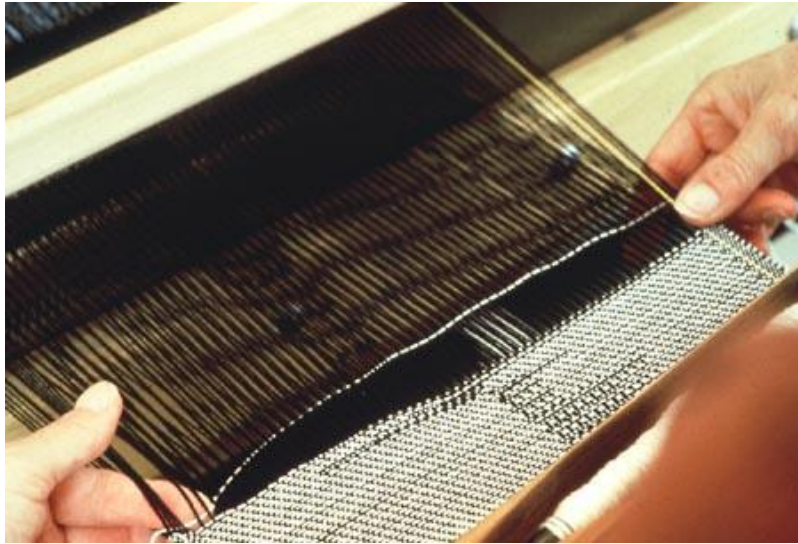


Holes in the cards control which threads are raised for weaving the pattern

Weaving and Computing

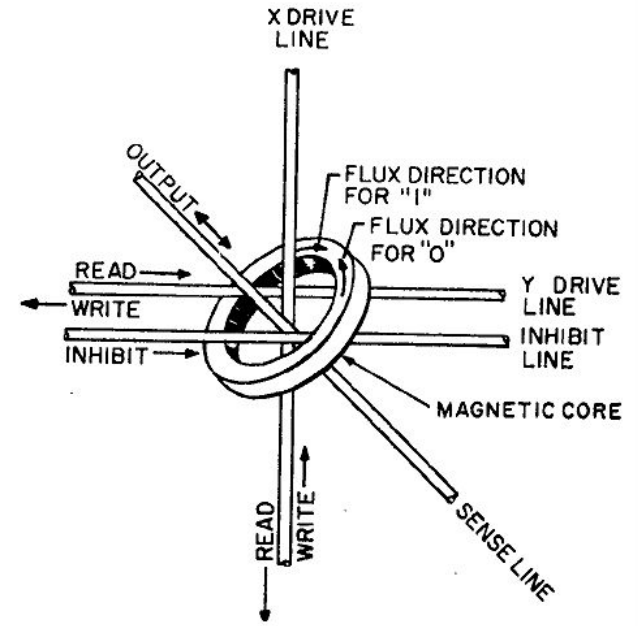
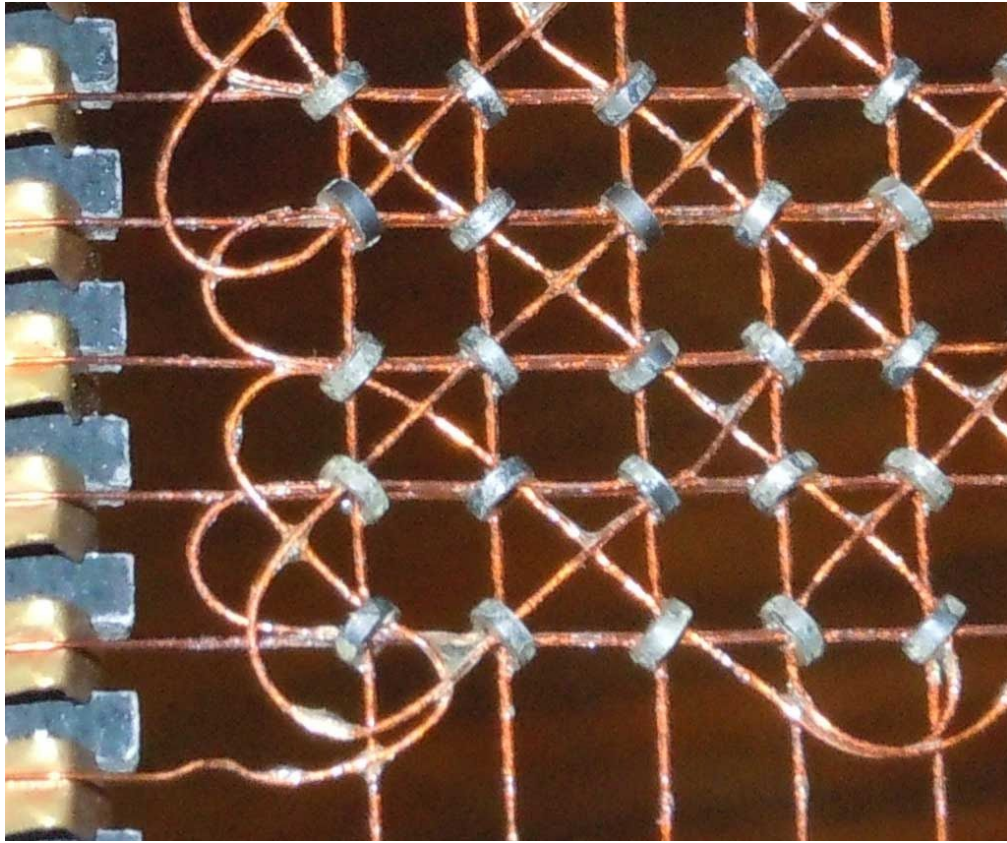
- Using punchcards to store and control sequence of operations
- 1837: Charles Babbage and Ada Lovelace, Analytical Engine, first general purpose machine





Ingrid Bachmann (1995): Fault
Lines





124.56

Figure 6-3.—Magnetic core showing "X," "Y," inhibit, and sense lines.

Magnetic Memory Core - An Wang (1955)

Woven Pressure Sensor

