Problem FC-2 (3 Parts) Branches, Jumps, Loops

Part A Write code that branches to **`Label`** when $1 is greater than 100. Modify only $2.

label	instruction	comment
	slti $2, $1, 101	*# is $1 >= 101*
	beq $2, $0, Label	*# then branch to label*

Part B Complete this subroutine that searches for the maximum value in a 100 element array (base address = **`Array`**). Return the result in $3. Use $1, $2, $3, and $4 as required.

Label	Instruction	Comment
Max:	**addi $1, $0, 396**	**# init array offset**
	lw $3, Array($1)	**# load initial max**
Loop:	*addi $1, $1, -4*	**# next element**
	lw $2, Array($1)	**# load element**
	slt $4, $3, $2	**# compare to Max**
	beq $4, $0, Skip	**# if New <= Max, skip**
	add $3, $2, $0	**# else set new Max**
Skip:	*bne $1, $0, Loop*	**# if not last, loop**
	jr $31	**# return to caller**

Part C State the three primary differences between MIPS branches and jumps.

	branches	**jumps**
1:	conditional	unconditional
2:	relative target	absolute target
3:	±32K instructions	0-64M instructions