

**2208 Assignment 4**  
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PSA: My 4<sup>th</sup> year physics thesis is due this week so I had very little time to do this assignment fully/properly. Sorry ☹

**Question 1:**

```
                AREA ques1, CODE, READONLY
                ENTRY

the string      ADR r0, STRING1                ;r0 is a pointer to
the end of     ADR r1, STRING2                ;r1 is the address at
the array      SUB r4, r1, r0                 ;r1 is the length of

Loop string    LDRB r2, [r0], #one             ;loads character of
is space       CMP r3, #spc                   ;checks if character
               BEQ equal                      ;branch if equal

notequal      STRB r2, [r1], #one             ;writes the value of
the string to the new string

equal of string LDRB r2, [r0], #one           ;loads next character
is t          CMP r2, #t                     ;checks if character
equal        BNE notequal                   ;branches if not

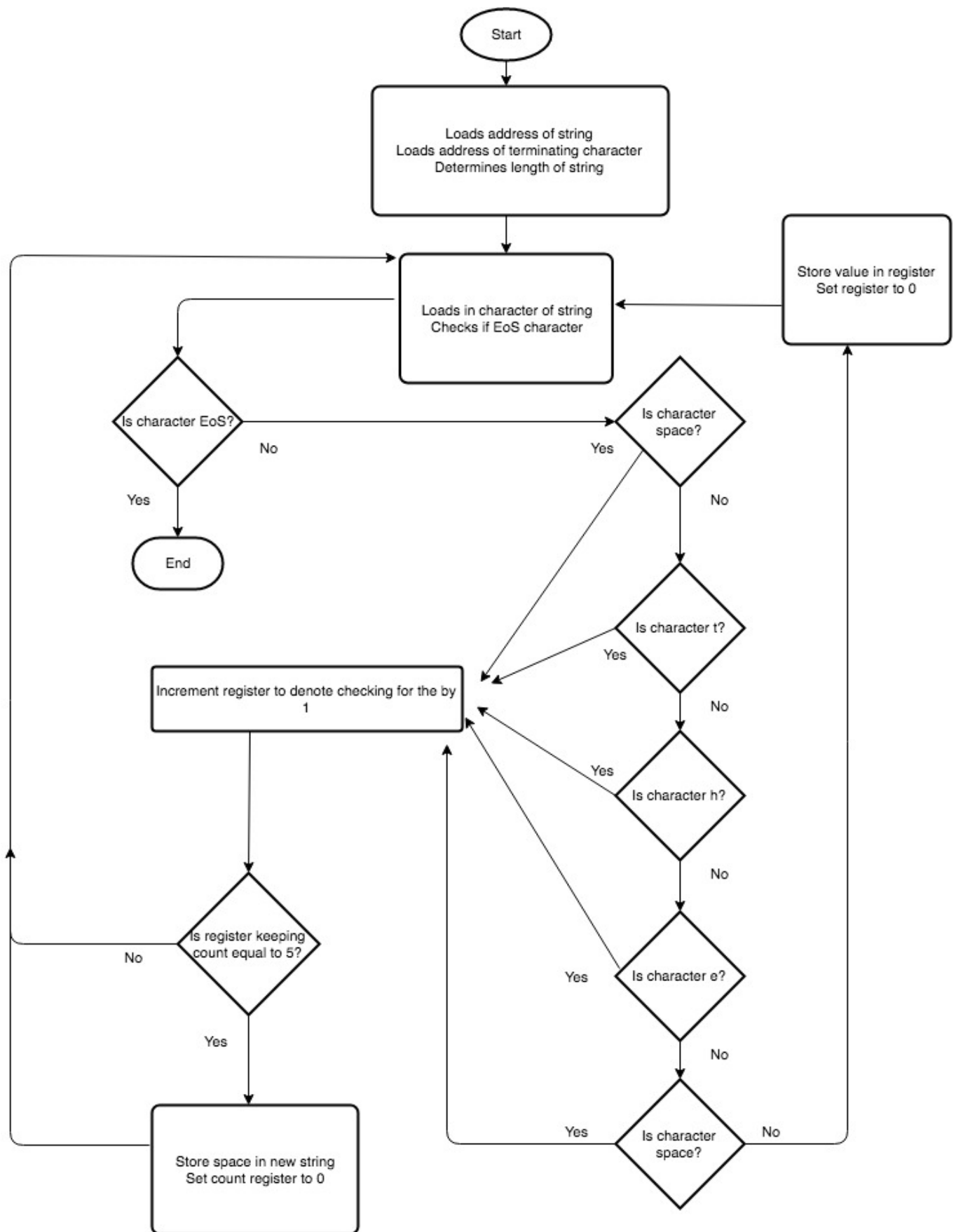
of string     LDRB r2, [r0], #one           ;loads next character
is h         CMP r2, #h                     ;checks if character
equal        BNE notequal                   ;branches if not

of string     LDRB r2, [r0], #one           ;loads next character
is e         CMP r2, #e                     ;checks if character
equal        BNE notequal                   ;branches if not

of string     LDRB r2, [r0], #one           ;loads next character
```

equal	BNE notequal	;branches if not
exit	B exit	;ends program
STRING1	AREA ques1, DATA, READWRITE	
EoS	DCB "and the man said they must go"	;string 1
STRING2	DCB 0X00	;end of string 1
bytes	space 0xFF	;just allocating 255
one	EQU 1	;sets label to value
of 1		
spc	EQU 0x20	;labels ASCII value
of space		
t	EQU 0x74	;labels ASCII value
of t		
h	EQU 0x68	;labels ASCII value
of h		
e	EQU 0x65	;labels ASCII value
of e		
	END	

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**Question 2:**

```
                AREA ques2, CODE, READONLY
                ENTRY

exit            B exit                ;exits program

                AREA ques2, DATA, READWRITE

a              DCD 5                  ;define value of a
b              DCD 6                  ;define value of b
c              DCD 7                  ;define value of c
d              DCD 90                 ;define value of d

                END
```

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