PRE-LAB

c)

Part 1 modified code

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| --- | --- | --- | --- |
| **Address** | **Content** | **Instruction** | **Description** |
| 2000 | CC003A | LDD #$3E | Load ASCII code for “>” |
| 2003 | FEEE86 | LDX $EE86 | Load the vector for *putchar* routine |
| 2006 | 1500 | JSR 0,X | Print what’s in B on terminal |
| 2008 | FEEE84 | LDX $EE84 | Load the vector for *getchar* routine |
| 200B | 1500 | JSR 0,X | Get a new character in B |
| 200D | 8603 | LDAA #15 | Initialize loop counter |
| 200F | 35 | PSHA | Save the counter on stack |
| 2010 | 37 | PSHB | Save contents of B on stack |
| 2011 | CC0020 | LDD #$3B | Load B with a “;” |
| 2014 | FEEE86 | LDX $EE86 | Load the vector for *putchar* routine |
| 2017 | 1500 | JSR 0,X | Print it on terminal |
| 2019 | 33 | PULB | Get original character |
| 201A | FEEE86 | LDX $EE86 | Load the vector for *putchar* routine |
| 201D | 1500 | JSR 0,X | Print it on terminal |
| 201F | 32 | PULA | Retrieve the counter |
| 2020 | 43 | DECA | Decrement loop counter |
| 2021 | 26EC | BNE $200F | If counter <> 0, repeat |
| 2023 | 3F | SWI | Return to the monitor |

Part 2 :

In armed.asm , change beq cdv\_while to bne cdv\_while

Part 3 :

In delay.asm , we add this code

setDelay :

STD delayCount

rts

Polldelay : pshb

Pshx

Pshy

LDD #delayCount

Loop\_delay\_count:

LDX #3000

Loop\_1\_ms:

NOP

NOP

NOP

NOP

DEX

BNE loop\_1\_ms

XGDX

DEX

BNE loop\_delay\_count

Puly

Pulx

Pulb

rts