Q2. Find Sum of 0X79, 0XF5, 0XE2.
Put higher bits in R21, lower in R20

__/__/____

```
.INCLUDE "M32DEF.INC"
.ORG  0
   LDI  R21,0          } ; initially clear
   LDI  R20,0          }
   LDI  R16,0X79
   ADD  R20,R16        ; R20=0+0X79=0X79, C=0
   BRSH N_1            ; if C=0, add next num.
   INC  R21            ; C=1, increment } higher byte=0
FUNC1: LDI  R16,0XF5
   ADD  R20,R16        ; R20=0X79+0XF5=0X65, C=1
   BRSH N_2            ; Branch if C=0. X
   INC  R21            ; C=1, increment } higher byte=01
FUNC2: LDI  R16,0XE2
   ADD  R20,R16        ; R20=0X6E+0XE2=0X50, C=1
   BRSH OVER           ; Branch if C=0
   INC  R21            ; C=1, increment } higher byte=02
OVER:
```

low byte.

Answer

Bytes.

Summary →	R21 (High)	R20 (Low)
Initially	0	00
Before LDI, R16, 0XF5	0	79
Before LDI, R16, 0XE2	1	6E
Finally	2	50

Assignment

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Assignment

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Q1. Add two 128 bit numbers A and B.

let C = A+B.

```
LDI R27, 0X0D
LDI R26, 0X0D
LDI R29, 0X0D
LDI R28, 0X10
LDI R31, 0X0D
LDI R30, 0X20

LDI R16, X+
LDI R17 Y+
ADD R17, R16
ST  Z+, R17

LDI R18, $15      ; 16times loop
LOOP:
    LDI R16, X+
    LDI R17, Y+
    ADC R17, R16
    ST  Z+ R17
    DEC R18
    BRNE LOOP; if !=0 loop.
```