LW $1, 1

110000|00|001|000|00|0000000000000001

LW $2, 2

110000|00|010|000|00|0000000000000010

110000|00|001|000|00|0000000000000001

Original Program

05 .Start,Math,05

05 .data

05 YY int.data 0

06 ZZ int.data 0

07 XX int.data 0

08 err str.data 'YY=0'

09 .text

09 exect.Start \*

09 inn 2, YY

A lw $2,YY

B lw $3, ZZ

C JEQ $2,$0,ERROR

D MUL $4,$3,$2

E MULI $4,$4,20

F DIV $5,$4,$2

10 SW $5, XX

11 outn 1,XX

12 HALT 0

13 ERROR outc 1, err

14 HALT 250

14 .end, Math

|  |
| --- |
| .Start,Math,05 |
| .data |
| 00000000 |
| 00000000 |
| 00000000 |
| 59593D30 |
| . text |
| 00101000000000100000000000000101 -> 0x28020005 |
| 11000010010000000000000000000101 -> 0xC0400005 |
| 11000000011000000000000000000110 -> 0xC0600006 |
| 10000000010000000000000000010011 -> 0x80400013 |
| 00000100100011010000000000011000 -> 0x048D0018 |
| 01010000100100000000000000010100 -> 0x50900014 |
| 00000100101100010000000000011010 -> 0x04B1001A |
| 10011100101000000000000000000111 -> 0x9CA00007 |
| 00110000000000010000000000000111 -> 0x30010007 |
| 00100000000000000000000000000000 -> 0x20000000 |
| 00110100000000010000000000001000 -> 0x34010008 |
| 00100000000000000000000011111010 -> 0x200000FA |
|  |

.Start,Math,05

.data

YY int.data 0

ZZ int.data 0

XX int.data 0

err str.data 'YY=0'

.text

Exect.Start \*

inn 2, YY

lw $2,#YY

lw $3, ZZ

JEQ $2,$0,ERROR

MUL $4,$3,$2

MULI $4,$4,20

DIV $5,$4,$2

SW $5, XX

outn 1,XX

HALT 0

ERROR outc 1, err

HALT 250

.end, Math

LOAD FILE FROM SP3

LH|0009|Math|0010|0005|2010:Sat|01:30:17|SAL-LINK|1.0|0.23|Math

LT|0005|Y|00000000|Math

LT|0006|Y|00000000|Math

LT|0007|Y|00000000|Math

LT|0008|Y|59593D30|Math

LT|0009|Y|28020005|Math

LT|000A|Y|C0400005|Math

LT|000B|Y|C0600006|Math

LT|000C|Y|80400013|Math

LT|000D|Y|048D0018|Math

LT|000E|Y|50900014|Math

LT|000F|Y|04B1001A|Math

LT|0010|Y|9CA00007|Math

LT|0011|Y|30010007|Math

LT|0012|Y|20000000|Math

LT|0013|Y|34010008|Math

LT|0014|Y|200000FA|Math

LE|0010|Math

Instructions binary templates

S

100111|00|101|000|00|0000000000000111

11000010010000000000000000000101

R-type

00000100101|100|010|000000|000|011010

I-type

010100|00|100|100|00|0000000000010100

OI-type

001101|00|000|00001|0000000000001000

J-type

001000|00|00000000|0000000011111010