1.

(a) int64_t a, b;

a = a + b;

```
LDRD    R0, R1, a
LDRD    R2, R3, b
ADDS    R0, R0, R2
ADC     R1, R1, R3
STRD    R0, R1, a
```

(b) int64_t a;

a -= 5;

```
LDRD    R0, R1, a
SUBS    R0, R0, 5
STRD    R0, R1, a
```

(c) int32_t a, b, c;

c = a * b;

```
LDR     R0, a
LDR     R1, b
MUL{S}  R2, R1, R0
STR     R2, c
```

(d) uint32_t a, b, c;

c = a * b;

```
LDR     R0, a
LDR     R1, b
MUL     R2, R1, R0
STR     R2, c
```

(e) int32_t a, b, c;

c = a / b;

```
LDR     R0, a
LDR     R1, b
SDIV    R2, R0, R1
STR     R2, c
```

(f) uin32_t a, b, c;

c = a / b;

```
LDR     R0, a
```

```
LDR         R1, b
UDIV        R2, R0, R1
STR         R2, c
```

(g) int32_t a, b, c;
c = a % b;

```
LDR         R0, a
LDR         R1, b
SDIV        R2, R0, R1          //R2 = quotient
MLS         R2, R1, R2, R0      //R2 = a - b * c
STR         R2, c
```

3.

uint32_t Volume(uint32_t height, uint32_t width, uint32_t len);

Volume:

```
            //R0 = height, R1 = width, R2 = len
            MUL         R3, R0, R1
            MUL         R3, R3, R2
            BX          LR
```