To find the no. of 0's & 1's in a 8-bit number.

```
Start
  │
  ▼
Initialise C with 00H,
contains the number
of 0's
  │
  ▼
initialise B with 00H,
contains the number
of 1's
  │
  ▼
Initialise E with 08H
  │
  ▼
Load HL pair with
2060H
  │
  ▼
Move the contents of
the memory to the
accumulator
  │
  ▼
Set Carry &
Complement carry
  │
  ▼
Rotate Accumulator
Left (RAL)
  │
  ▼
Carry ?  ──True──▶  We have got 1 and
  │                 so increment B
False                   │
  ▼                     │
We have got 0 so        │
increment C             │
  │                     │
  ▼                     │
Decrement E  ◀──────────┘
  │
  ▼
Zero ?
```

1010 1110	2060H
05	2070H
03	2071H

Carry ? — False (returns to Set Carry & Complement carry)

Zero ? — False (returns to Set Carry & Complement carry)

Zero ? — True

Store B, i.e., number of 1's to location 2070H → Store C, i.e., number of 0's to location 2071H → End