object oriented programming.

object physical memory.

| Dec | Char |  | Dec | Char | Dec | Char | Dec | Char |
|-----|------|--|-----|------|-----|------|-----|------|
| 0 | NUL | (null) | 32 | SPACE | 64 | @ | 96 | ` |
| 1 | SOH | (start of heading) | 33 | ! | 65 | A | 97 | a |
| 2 | STX | (start of text) | 34 | " | 66 | B | 98 | b |
| 3 | ETX | (end of text) | 35 | # | 67 | C | 99 | c |
| 4 | EOT | (end of transmission) | 36 | $ | 68 | D | 100 | d |
| 5 | ENQ | (enquiry) | 37 | % | 69 | E | 101 | e |
| 6 | ACK | (acknowledge) | 38 | & | 70 | F | 102 | f |
| 7 | BEL | (bell) | 39 | ' | 71 | G | 103 | g |
| 8 | BS | (backspace) | 40 | ( | 72 | H | 104 | h |
| 9 | TAB | (horizontal tab) | 41 | ) | 73 | I | 105 | i |
| 10 | LF | (NL line feed, new line) | 42 | * | 74 | J | 106 | j |
| 11 | VT | (vertical tab) | 43 | + | 75 | K | 107 | k |
| 12 | FF | (NP form feed, new page) | 44 | , | 76 | L | 108 | l |
| 13 | CR | (carriage return) | 45 | - | 77 | M | 109 | m |
| 14 | SO | (shift out) | 46 | . | 78 | N | 110 | n |
| 15 | SI | (shift in) | 47 | / | 79 | O | 111 | o |
| 16 | DLE | (data link escape) | 48 | 0 | 80 | P | 112 | p |
| 17 | DC1 | (device control 1) | 49 | 1 | 81 | Q | 113 | q |
| 18 | DC2 | (device control 2) | 50 | 2 | 82 | R | 114 | r |
| 19 | DC3 | (device control 3) | 51 | 3 | 83 | S | 115 | s |
| 20 | DC4 | (device control 4) | 52 | 4 | 84 | T | 116 | t |
| 21 | NAK | (negative acknowledge) | 53 | 5 | 85 | U | 117 | u |
| 22 | SYN | (synchronous idle) | 54 | 6 | 86 | V | 118 | v |
| 23 | ETB | (end of trans. block) | 55 | 7 | 87 | W | 119 | w |
| 24 | CAN | (cancel) | 56 | 8 | 88 | X | 120 | x |
| 25 | EM | (end of medium) | 57 | 9 | 89 | Y | 121 | y |
| 26 | SUB | (substitute) | 58 | : | 90 | Z | 122 | z |
| 27 | ESC | (escape) | 59 | ; | 91 | [ | 123 | { |
| 28 | FS | (file separator) | 60 | < | 92 | \ | 124 | | |
| 29 | GS | (group separator) | 61 | = | 93 | ] | 125 | } |
| 30 | RS | (record separator) | 62 | > | 94 | ^ | 126 | ~ |
| 31 | US | (unit separator) | 63 | ? | 95 | _ | 127 | DEL |

$i = 118$ (int)

$j = `V'$ (str) $\rightarrow$ (118)

int object

$$
\begin{array}{|c|c|c|c|c|c|c|c|}
2^7 & 2^6 & 2^5 & 2^4 & 2^3 & 2^2 & 2^1 & 2^0 \\
\hline
0 & 1 & 1 & 1 & 0 & 1 & 1 & 0 \\
\end{array}
$$

$i \rightarrow$

str object

$$
\begin{array}{|c|c|c|c|c|c|c|c|}
2^7 & 2^6 & 2^5 & 2^4 & 2^3 & 2^2 & 2^1 & 2^0 \\
\hline
0 & 1 & 1 & 1 & 0 & 1 & 1 & 0 \\
\end{array}
$$

$j \rightarrow$
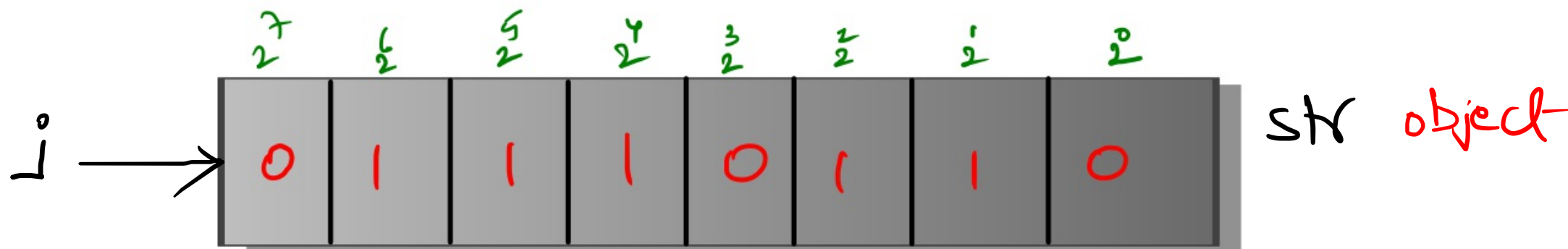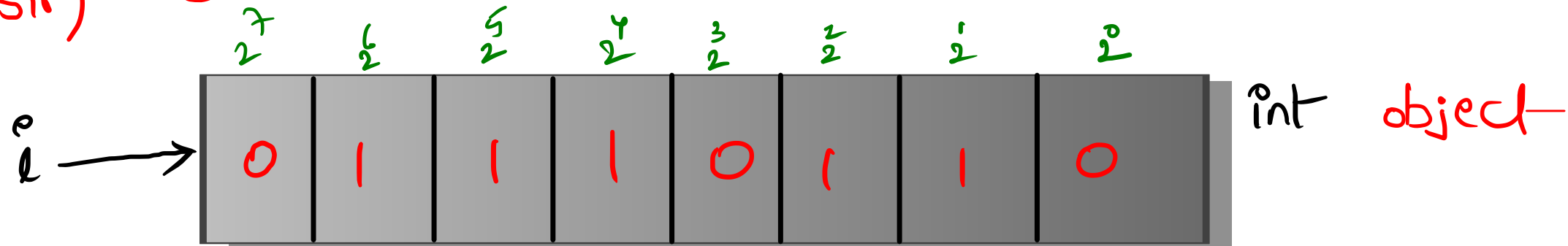
```
2 | 118
2 | 59 - 0
2 | 29 - 1
2 | 14 - 1
2 | 7 - 0
2 | 3 - 1
    1 - 1
```

$1110110_{(2)}$

Print $(i, j) \rightarrow 118 \quad V$

# How to create new data type?

new data type
(or)
user defined data type
(or)
class name

class → keyword

mydatatype :

keyword ←→ block of code

# How to create object?

datatype_name( )

ex: → m = mydatatype( )

m →  mydatatype

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