

CHAPTER 2

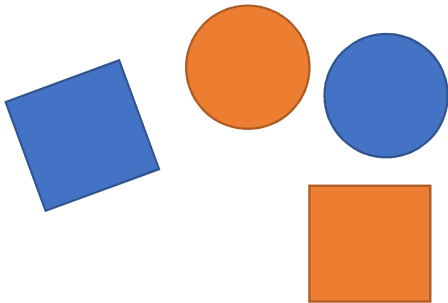
HOMework

ENCODING

Process of encoding

1

Understand
all **possible values**
to your information

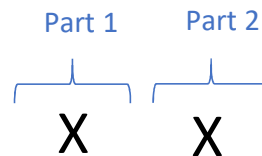


RULES

- ✓ The shape can be a **square or circle**
- ✓ The shape can be **orange or blue**

2

Define the encoding
rules



Part 1- The color

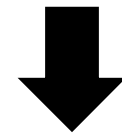
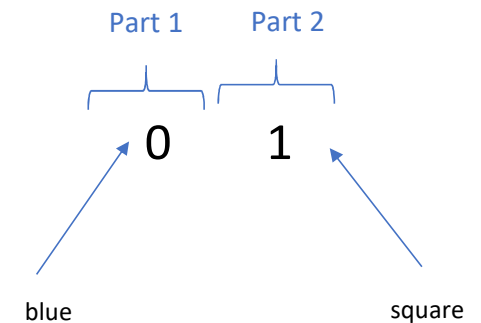
BIT	COLOR
0	BLUE
1	ORANGE

Part 2- The shape

BIT	SHAPE
0	CIRCLE
1	SQUARE

3

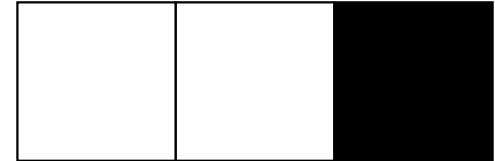
Apply the encoding rules



Define the encoding rules

IMAGE RULES

- ✓ The image has 3 pixels
- ✓ Always 1 black pixel (*and only 1*)
- ✓ The black pixel can be anywhere



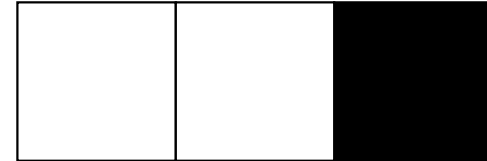
ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary

Define the encoding rules

IMAGE RULES

- ✓ The image has 3 pixels
- ✓ Always 1 black pixel (*and only 1*)
- ✓ The black pixel only **first or last cells**



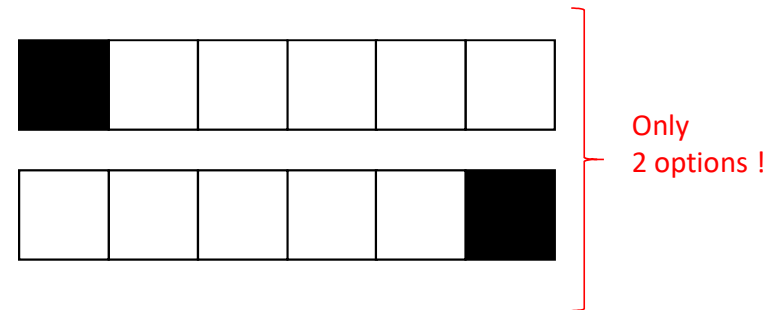
ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
Black color position	1 Frist position	01
	2 Second position	10
	3 Last position	11

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 6 **pixels**
- ✓ Always **1 black pixel** (*and only 1*)
- ✓ The black pixel can be **only at first of last position**



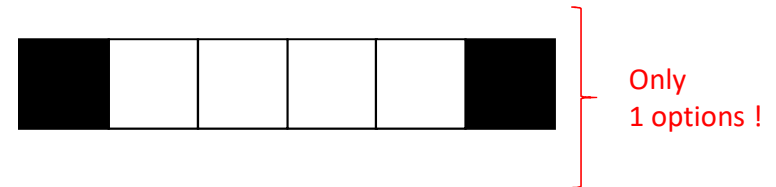
ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
Black color position	0 frist position 1 Last position	0 1

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 6 **pixels**
- ✓ Always **2 black pixel** (*and only 2*)
- ✓ The black pixel can be **only at first and last position**



ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
မိနပြုလုပ်		

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 6 pixels
- ✓ All cells are black



Only
1 options !

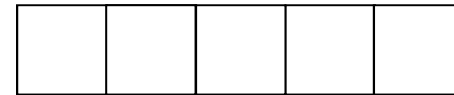
ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
មិនប្រែប្រួលទីតាំង	0 black	0

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 6 pixels
- ✓ All cells are white



Only
1 options !

ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
មិនប្រែប្រួល	1 white	1

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 6 pixels
- ✓ All cells are white or black



Only
2 options !

ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
Black color	0 black	0
White color	1 white	1

Part 1

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 5 **pixels**
- ✓ Always **3 black pixel** (*and only 3*)
- ✓ The black pixel can be **only at first, center and last position**



Only
1 options !

ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
မိနပြုလုပ်	0 black 1 white	0 1

Part 1

Define the encoding rules for this case

IMAGE RULES

- ✓ The image has 5 **pixels**
- ✓ Always **3 black pixel** (*and only 3*)
- ✓ The black pixel can be **anywhere**



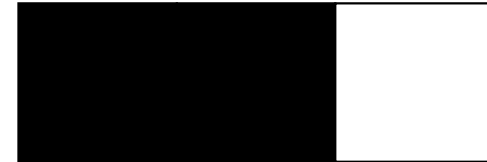
ENCODING RULES

Meaning	Encoding in decimal	Encoding in binary
Black color position	1 white color 0 black color	1 0

Define the encoding rules

IMAGE RULES

- ✓ The image has 3 pixels
- ✓ 1 to 3 black pixels
- ✓ The black pixels can be anywhere



Part 1

Part 2

Part 3

Meaning	Encoding in decimal	Encoding in binary
Black color position	1 white 0 black	1 0
Black color position	1 white 0 black	1 0
Black color position	1 white 0 black	1 0

Define the encoding rules

IMAGE RULES

- ✓ The image has 5 pixels
- ✓ 1 to 4 black pixels
- ✓ The black pixels can be anywhere



Part 1

Part 2

Part 3

Part 4

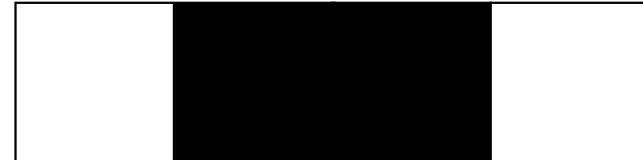
Part 5

Meaning	Encoding in decimal	Encoding in binary
Black color position	1 white 0 black	01 00
Black color position	1 white 0 black	01 00
Black color position	1 white 0 black	01 00
Black color position	1 white 0 black	01 00
Black color position	1 white 0 black	01 00

Define the encoding rules

IMAGE RULES

- ✓ The image has 1 to 4 pixels
- ✓ 1 to 3 black pixels
- ✓ The black pixels shall be together



Part 1

Meaning	Encoding in decimal	Encoding in binary
Black color position	1 white 0 black	1 0
Black color position	1 white 0 black	1 0
Black color position	1 white 0 black	1 0

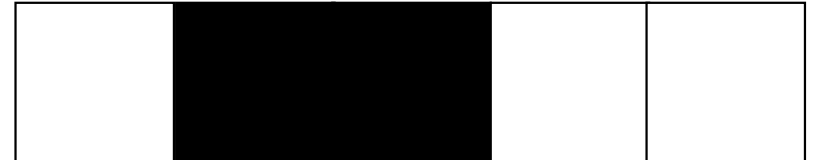
Part 2

Part 3

Define the encoding rules

IMAGE RULES

- ✓ The image has 1 to 5 pixels
- ✓ 1 to 4 black pixels
- ✓ The black pixels shall be together



Part 1

Meaning	Encoding in decimal	Encoding in binary
Black color	0 black 1 white	0 1
Black color	0 black 1 black	0 1
Black color	0 black 1 white	0 1

Part 2

Part 3

Define the encoding rules

IMAGE RULES

- ✓ The image has 1 to 3 pixels
- ✓ 1 to 3 black pixels
- ✓ The black pixels shall be anywhere



	Meaning	Encoding in decimal	Encoding in binary
Part 1	Black color position	0 black 1 white	0 1
Part 2	Black color positionn	0 black 1 white	0 1
Part 3	Black color position	0 black 1 white	0 1