

# ASSIGNMENT 1

(Answers)

Q-1)

	4	2	1
1- (5)----->	①	①	①

	16	8	4	2	1
2- (31)---->	①	①	①	①	①

	64	32	16	8	4	2	1
3- (112)--->	①	①	①	①	①	①	①

	128	64	32	16	8	4	2	1
4- (255)--->	①	①	①	①	①	①	①	①

Q-2)

1- (11110001) --->  $1 \times 128 = 128$   
 $1 \times 64 = 64$   
 $1 \times 32 = 32$   
 $1 \times 16 = 16$   
 $1 \times 1 = 1$

-----  
**= 241**

$$2- (11001010) \text{ ---> } 1*128 = 128$$

$$1*64 = 64$$

$$1*8 = 8$$

$$1*2 = 2$$

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$$= 202$$

$$3- (11111111) \text{ ---> } 1*128 = 128$$

$$1*64 = 64$$

$$1*32 = 32$$

$$1*16 = 16$$

$$1*8 = 8$$

$$1*4 = 4$$

$$1*2 = 2$$

$$1*1 = 1$$

-----

$$= 255$$

$$4- (00011100) \text{ ---> } 1*16 = 16$$

$$1*8 = 8$$

$$1*4 = 4$$

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$$= 28$$

### Q-3)

**1- (Hello) ---> From “ASCII” Table :-**

H	e	l	l	o
72	101	108	108	111

From Decimal to Binary :-

72---> 1001000

101---> 1100101

108---> 1101100

111---> 1101111

Then :-

Hello ---> 1001000 1100101 1101100 1101100 1101111

**2- (Python) ---> From “ASCII” Table :-**

P	y	t	h	o	n
80	121	116	104	111	110

From Decimal to Binary :-

80---> 1010000

121---> 1111001

116---> 1110100

104---> 1101000

111---> 1101111

110---> 1101110

Then :-

Python ---> 1010000 1111001 1110100 1101000 1101111  
1101110

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Q-4)

From Binary to Decimal :-

- |                     |     |        |     |
|---------------------|-----|--------|-----|
| 1- (01011001) --->  | 89  | -----> | (Y) |
| 2- (01101111) --->  | 111 | -----> | (o) |
| 3- (1110101) -----> | 117 | -----> | (u) |
| 4- (01000100) --->  | 68  | -----> | (D) |
| 5- (01101001) --->  | 105 | -----> | (i) |
| 6- (1100100) -----> | 100 | -----> | (d) |
| 7- (01000111) --->  | 71  | -----> | (G) |
| 8- (01101111) --->  | 111 | -----> | (o) |
| 9- (1101111) -----> | 111 | -----> | (o) |
| 10- (1100100) --->  | 100 | -----> | (d) |
| 11- (1001010) --->  | 74  | -----> | (J) |
| 12- (01101111) -->  | 111 | -----> | (o) |
| 13- (1100010) --->  | 98  | -----> | (b) |

Then the text is :-

YouDidGoodJob