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Number System Problem – 1

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

15

Binary

1	1	1	1

2^3 2^2 2^1 2^0

8 + 4 + 2 + 1

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Digital Electronics Problem – 2

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
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5. **Do the problems in an easy way.**

Decimal

13

Binary

1	1	0	1

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Digital Electronics Problem – 3

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
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4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

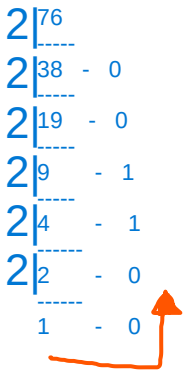
Decimal

7	6

Binary

0	1	0	0	1	1	0	0

* keep MSB bit(b7) as 0.



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Digital Electronics Problem – 4

Instructions:

1. **Do not discuss with any one while solving the problems**
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3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

9	0

Binary

0	1	0	1	1	0	1	0

=> (0x 2^7) + (1x2^6)+(0x2^5)+(1x2^4) +(1x2^3)+(0x2^2) +(1x2^1) +(0x2^0)
=> 0 + 64 + 0 + 16 + 8 + 0 + 2 + 0
=> 90

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Digital Electronics Problem – 5

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

218

Binary

1	1	0	1	1	0	1	0

=> (1x 2^7) + (1x2^6)+(0x2^5)+(1x2^4) +(1x2^3)+(0x2^2) +(1x2^1) +(0x2^0)
=> 128 + 64 + 0 + 16 + 8 + 0 + 2 + 0
=> 218

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Digital Electronics Problem – 6

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

156

2	156
2	78 - 0
2	39 - 0
2	19 - 1
2	9 - 1
2	4 - 1
2	2 - 0
	1 - 0

Binary

1	0	0	1	1	1	0	0

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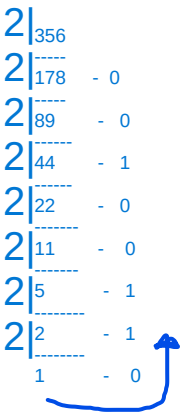
Digital Electronics Problem – 7

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**



Decimal

356

Binary

1	0	1	1	0	0	1	0	0
2^8	2^7	2^6	2^5	2^4	2^3	2^2	2^1	2^0
256		64	32			4		

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Digital Electronics Problem – 8

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

347

Binary

1	0	1	0	1	1	0	1	1

=> (1x2^8) + (0x2^7)+ (1x2^6)+)(0x2^5)+(1x2^4)+(1x2^3)+(0x2^2) + (1x2^1) + (1x2^0)
=> 256 + 0 + 64 + 0 + 16 + 8 + 0 + 2 + 1
=> 347

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Digital Electronics Problem – 9

Instructions:

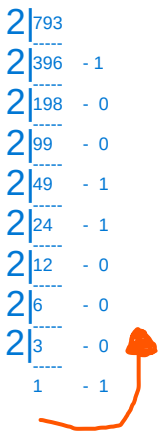
1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

793

Binary

1	1	0	0	0	1	1	0	0	1



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Digital Electronics Problem – 10

Instructions:

1. **Do not discuss with any one while solving the problems**
2. **Do not use internet while solving the problems**
3. **Do not use books while solving the problems**
4. **Do not try to copy from others**
5. **Do the problems in an easy way.**

Decimal

694

Binary

1	0	1	0	1	1	0	1	1	1

=>(1x2^9)+(0x2^8)+(1x2^7)+(0x2^6)+(1x2^5)+(1x2^4) + (0x2^3)+(1x2^2)+(1x2^1)+(1x2^0)
=>512 + 0 + 128 + 0 + 32 + 16 + 0 + 4 + 2 + 1
=>695