Question 2: Convert 278	Step 3: Multiply each digit of the number with 8"1, when from the right end of the number.
Solution:	in the decimal part by $8^{\frac{1}{m}}$ when the digit is in the m th pos
Given number is 27 ₈	Step 4: Add all terms after multiplication
$27_8 = (2 * 8^1) + (7 * 8^0)$	Step 5: The obtained value is the equivalent decimal fitting Step 6: Consider the decimal number, divide it by 2
= 2 * 8 + 7 * 1	Step 7: Note the remainder
the quotient is zero order to zero entre	Step 8: Continue the above two steps for the quotient till Step 9: Write the remainders in the reverse order
= 23 (Decimal number)	Step 10: The obtained number is the equivalent binary number.
Navy convert this desired numb	ber to a binary number. gattraver of respective seems as see
Now convert this decimal number	jei to a biliary number.
And the state of the state of the state of the state of	w are the examples on converting octal to binary numbe
2 <u>11</u> 1 2 <u>5</u> 1	ed Examples
2 <u>3</u> 1 2 <u>2</u> 1	estion 1: Convert 41s to a binary number.
2 1 0	
2 0 1	inaili
The binary number is 101112	en number is 41g
• 1 mm • 1 mm • 1 mm	$= (4 * 8^1) + (1 * 8^0)$
Answer: $27_8 = 10111_2$	1*1+8*
Question 3: Convert 10 ₈ t	o a binary number.
Solution:	3(Decimal number)
Given number is 10_8 $10_8 = (1 * 8^1) + (0 * 8^0)$	by convert this decimal number to a binary number.
= 1 * 8 + 0 * 1	
= 8 + 0	
= 8(Decimal number)	1-01
Now convert this decimal number	er to a binary number.
2 8 0	U <u>(5)</u>
2 40	[20
2 2 0	0-1
The himory number :- 1000	he binary number is 1000012
The binary number is 1000_2 Answer: $10_8 = 1000_2$	insiver: 41s = 1000012

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Question 2: Convert 278 to a binary number.
Solution:
  in the decimal part by 8" when the digit is in the mits position from the decimal point
Given number is 278
                                          Step 4: Add all terms after multiplication
                           Step 5: The obtained value is the equivalent decimal fitting
27_8 = (2 * 8^1) + (7 * 8^0)
                                  Step 6: Consider the decimal number, divide it by
                                                       Step 7: Note the remainder
=2*8+7*1
          Step 8: Continue the above two steps for the quotient till the quotient is zero
= 16 + 7
                                    Step 9: Write the remainders in the reverse order
Step 10: The obtained number is the equivalent binary number f (redmun lamined number)
Now convert this decimal number to a binary number. gnitrovnoo not solganaxo organizados sur follo
                            Below are the examples on converting octal to bloary admber
2 | 23
2 | 11 -- 1
                                                                   Solved Examples
2 | 5 -- 1
2 2 -- 1
                                     Odestion 1: Convert 41s to a binary number.
2 | 1 -- 0
2 | 0 -- 1
 The binary number is 101112
                                                                 4) 4 = (4 # 8) + (1 # 80)
 Answer: 27_8 = 10111_2
                                                                                14-SE =
 Question 3: Convert 108 to a binary number.
                                                                 = 33(Decimal number)
 Solution:
                                     Now convert this decimal number to a binary number.
 Given number is 108
 10_8 = (1 * 8^1) + (0 * 8^0)
 = 1 * 8 + 0 * 1
 = 8 + 0
 = 8(Decimal number)
 Now convert this decimal number to a binary number.
 2 8 -- 0
 2 4--0
 2 | 2 -- 0
    1
                                                          The binary number is 1000012
 The binary number is 1000<sub>2</sub>
                                                                Answer: 41_8 = 1000012
 Answer: 10_8 = 1000_2
```

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