**Using 1´s complement in subtraction :**

 Instead of subtracting a number we add the 1´s complement of the number , the last carry is then added to the number to get the final answer .

***EX***: 7 111 111

010 +

 -5 - 101 1´s

 2 carry 1 001

 + ve. No. 1 +

010

***EX***: 3 011 011

 -5 -101 1´s +010

 -2 101

 No carry -ve. No.

 101 010

**9´s and 10´s complements in decimal :**

 The 9´s comp. (similar to the 1´s comp.) is found by subtracting each decimal digit from 9 .

***EX***: 99

 - 25

 74 is the 9´s comp. of 25

***EX***: 9999

 -6291

 3708 is the 9´s comp.

10´s comp. = 9´s comp. + 1

***EX***: 74 + 1 =75 is the 10´s comp. of 25

***EX***: 9.99

 - 4.52

 5.47 is 9´s comp.

 + 1

 is 10´s comp 5.48

**7´s and 8´s complements in octal :**

 7´s = 7 – each digit

 8´s = 7´s + 1

***EX:*** 7777

 - 2415

 is 7´s comp. 5362

 +1

 5363 is 8´s comp.

***EX:*** Perform 75268 - 31428 using 8's comp.:

 7777

 -3142

 4635 + 1 = 4636

 1 1

 7526

 + 4636

  12 – 8 = 4

 11 - 8 = 3

 12 - 8 = 4

 1 4364 the result

***H.W.*** Perform the following using 8's complement:

 5458 – 148 =

 67768 – 43378 =