**Programming Fundamentals**

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**Section Y2**

**Riddles**

1. **A number can be multiplied by multiple of nine i.e 9 18 27 36 45 ... and the resulting number consist of only one digit.Can you identify the number?\**

12345679  
  
12345679 x 9 = 111111111 (only 1s)  
12345679 x 18 = 222222222 (only 2s)  
12345679 x 27 = 333333333 (only 3s)  
12345679 x 36 = 444444444 (only 4s)

1. **There are two ways by using three time the same number with an plus(+) operator , you can make sum as 60.  
   Whats the other they ?**

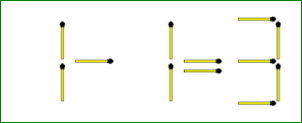
20 + 20 + 20  
  
55 + 5

1. **We can create number 100 by using all numbers, i.e.0123456789 and mathematical operators (+/-) in many ways.  
   Example  
   98 + 7 + 6 - 5 - 4 - 3 + 2 - 1 = 100  
   But if we add a condition that the use of the number 21 is the must. Then there are only a few solutions.  
   One of such solution is:  
   98 - 7 - 6 - 5 - 4 + 3 + 21 = 100  
   Can you tell any other solution?**

**9 - 8 + 76 - 5 + 4 + 3 + 21 = 100**  
  
  
Other ways of making number 100 (withiout using number 32)  
98 + 7 + 6 - 5 - 4 - 3 + 2 - 1 = 100  
98 - 7 - 6 - 5 - 4 + 3 + 21 = 100  
9 - 8 + 76 - 5 + 4 + 3 + 21 = 100  
98 - 7 + 6 + 5 + 4 - 3 - 2 - 1 = 100  
98 + 7 - 6 + 5 - 4 + 3 - 2 - 1 = 100  
98 + 7 - 6 + 5 - 4 - 3 + 2 + 1 = 100  
98 - 7 + 6 + 5 - 4 + 3 - 2 + 1 = 100  
98 - 7 + 6 - 5 + 4 + 3 + 2 - 1 = 100  
98 + 7 - 6 - 5 + 4 + 3 - 2 + 1 = 100  
98 - 7 - 6 + 5 + 4 + 3 + 2 + 1 = 100  
9 + 8 + 76 + 5 + 4 - 3 + 2 - 1 = 100  
9 + 8 + 76 + 5 - 4 + 3 + 2 + 1 = 100

1. **Afridi and Younis were batting on 94.Seven runs were required to win by the team and only three balls were left. At the end, both of them secured a century without being out.  
   How can this be feasible?**

Afridi hit a sixer and then got retired hurt.  
Shoaib Malik came but he got run out after he and Kohli had crossed halfway.  
On the next ball, Younis scored a six and was not out at 100.

1. 

**Can you move four matchsticks to make the equation true?**

