If cache access time is 100ns, main memory access time is 1000ns and the hit raio is 0.9. Find the average access time and also define hit ratio.

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## **RGPV 2020**

Solution:

Given,

Cache access time = 100ns

Memory access time = 1000ns

Hit ratio = 0.9

Average access time = Hit ratio x Cache access time + (1 - Hit ratio) x Main memory access time

Using above formula:

Average access time =  $0.9 \times 100 \text{ns} + (1 - 0.9) \times 1000 \text{ns} = 190 \text{ns}$ 

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