Here, one triplet is formed, which is 7^3. Hence, 343 can be expressed as the product of the triplets of

7.

Therefore, 343 is a perfect cube.

(iv) 256 is not a perfect cube.

(v) 8000

Resolving 8000 into prime factors:

$8000 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 5 \times 5 \times 5$

Here, three triplets are formed, which are 2^3, 2^3 and 5^3. Hence, 8000 can be expressed as the

product of the triplets of 2, 2 and 5, i.e. $2^3 \times 2^3 \times 5^3 = 20^3$

Therefore, 8000 is a perfect cube.

(vi) 9261

Resolving 9261 into prime factors:

$9261 = 3 \times 3 \times 3 \times 7 \times 7 \times 7$

Here, two triplets are formed, which are 3^3 and 7^3. Hence, 9261 can be expressed as the product of

*********** END *********