**Subnetting procedure:**   
  
The given Ip was = 193.87.214.0/22

From this we got the Network ID = 193.87.212.0/22  
  
Since we need to create 5 networks for 5 departments, we need to create 5 subnets from 193.87.212.0/22.

By taking the last 2 bits in the 3rd octet as Network ID, we can create the following 4 subnets-

1. *11000001.01010111.11010100*.00000000 = 193.87.212.0/24
2. *11000001.01010111.11010101*.00000000 = 193.87.213.0/24
3. *11000001.01010111.11010110*.00000000 = 193.87.214.0/24
4. *11000001.01010111.11010111*.00000000 = 193.87.215.0/24

To create enough subnets, we decided to divide 193.87.212.0/24 in half-

193.87.212.0/24 -> *11000001.01010111.11010100.0*0000000 = 193.87.212.0/25

*11000001.01010111.11010100.1*0000000 = 193.87.212.128/25

The final networks are -

1. Human Resouces: 193.87.213.0/24
2. Research & Development: 193.87.214.0/24
3. Production: 193.87.212.0/25
4. Finance: 193.87.212.128/25
5. Sales & Marketing: 193.87.215.0/24