**AIM**

Assume the variable rank contains the process rank and root is 3. What will be stored in array b [ ] on each of four processes if each executes the following code fragment?

*int b [4] = {0 , 0 , 0 , 0};*

*MPI\_Gather ( & rank , 1 , MPI\_INT , b , 1 , MPI\_INT , root ,MPI\_COMM\_WORLD);*  
  
Hint. The function prototype is as follows:

int MPI\_Gather (

void \* sendbuf , // pointer to send buffer

int sendcount , // number of items to send

MPI\_Datatype sendtype , // type of send buffer data

void \* recvbuf , // pointer to receive buffer

int recvcount , // items to receive per process

MPI\_Datatype recvtype , // type of receive buffer data

int root , // rank of receiving process

MPI\_Comm comm ) // MPI communicator to use

**Source Code**

**Execution**

**Remarks**