Memory allocation has a major influence on multiuser systems, cloud-based services, virtual machines, and other computer systems.In addition, we show that proposed algorithm is robust and faster and has a fairness index that is superior to that of existing techniquesWe use simulation to compare our new mechanism with existing memory allocation methods that have been deployed using Amazon Elastic Compute Cloud as a test bed.The memory is divided into multiple zones, where a subgroup of relative request sizes compete in reverse order.Memory allocation is a process that assigns physical or virtual memory space to programs and services as efficiently and quickly as possible.In this paper, we introduce a new memory allocation algorithm based on sequential fits and zoning for on-demand (online) cloud services.