Cavendish banana fruits harvested at mature stage were investigated. The results showed that the untreated fruit stored at 20°C and 13°C could maintain the quality to 8 and 13 days of storage, respectively. Subsequently, these fruits were overripened. The using of 20 30 40 and 50 µm-thick Polyethylene (PE) bags could minimize weight loss and shrinkage of banana fruits during storage and maintained good appearance until 28 days of storage. The using of different thickness of PE bags with banana fruits could delay changing of peel color, fruits softening of pulp and peel, respiration and ethylene production rate. EDTA-soluble pectin and HCL-soluble pectin decreased slowly during storage. The using of 40 µm-thick Polyethylene (PE) bags showed the best appearance and good quality of banana fruits during storage.