Out apply() apply(array, margin, fn) list, vector, or array =apply fn on array margin lapply() list lapply(object, fn) =apply fn on each element sapply() sapply(object, fn) simplest R object that can hold output (simplify=T) =lapply w/ simplified out vapply() vapply(object, fn, fn.value) object of type and dim like fn.value =sapply w/ defined out tapply() tapply(vec, factor(s), fn) simplest R object that can hold output (simplify=T) =apply fn on subsets of vec mapply() mapply(fn, v1, v2, ... vn) simplest R object that can hold output (simplify=T) =apply fn w/ args from vectors