

Chapter 3 Packages

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3.1 Packages

```
library(ggplot2)
qplot

## function (x, y, ..., data, facets = NULL, margins = FALSE, geom = "auto",
##   xlim = c(NA, NA), ylim = c(NA, NA), log = "", main = NULL,
##   xlab = NULL, ylab = NULL, asp = NA, stat = deprecated(),
##   position = deprecated())
## {
##   deprecate_soft0("3.4.0", "qplot()")
##   caller_env <- parent.frame()
##   if (lifecycle::is_present(stat))
##     lifecycle::deprecate_stop("2.0.0", "qplot(stat)")
##   if (lifecycle::is_present(position))
##     lifecycle::deprecate_stop("2.0.0", "qplot(position)")
##   check_character(geom)
##   exprs <- enquos(x = x, y = y, ...)
##   is_missing <- vapply(exprs, quo_is_missing, logical(1))
##   is_constant <- (!names(exprs) %in% ggplot_global$all_aesthetics) |
##     vapply(exprs, quo_is_call, logical(1), name = "I")
##   mapping <- new_aes(exprs[!is_missing & !is_constant], env = parent.frame())
##   consts <- exprs[is_constant]
##   aes_names <- names(mapping)
##   mapping <- rename_aes(mapping)
##   if (is.null(xlab)) {
##     if (quo_is_missing(exprs$x)) {
##       xlab <- ""
##     }
##     else {
##       xlab <- as_label(exprs$x)
##     }
##   }
##   if (is.null(ylab)) {
##     if (quo_is_missing(exprs$y)) {
##       ylab <- ""
##     }
##     else {
##       ylab <- as_label(exprs$y)
##     }
##   }
##   if (missing(data)) {
```

```

##      data <- data_frame0()
##      facetvars <- all.vars(facets)
##      facetvars <- facetvars[facetvars != "."]
##      names(facetvars) <- facetvars
##      facetsdf <- as.data.frame(mget(facetvars, envir = caller_env))
##      if (nrow(facetsdf))
##        data <- facetsdf
##    }
##    if ("auto" %in% geom) {
##      if ("sample" %in% aes_names) {
##        geom[geom == "auto"] <- "qq"
##      }
##      else if (missing(y)) {
##        x <- eval_tidy(mapping$x, data, caller_env)
##        if (is.discrete(x)) {
##          geom[geom == "auto"] <- "bar"
##        }
##        else {
##          geom[geom == "auto"] <- "histogram"
##        }
##        if (is.null(ylab))
##          ylab <- "count"
##      }
##      else {
##        if (missing(x)) {
##          mapping$x <- quo(seq_along(!mapping$y))
##        }
##        geom[geom == "auto"] <- "point"
##      }
##    }
##    p <- ggplot(data, mapping, environment = caller_env)
##    if (is.null(facets)) {
##      p <- p + facet_null()
##    }
##    else if (is.formula(facets) && length(facets) == 2) {
##      p <- p + facet_wrap(facets)
##    }
##    else {
##      p <- p + facet_grid(rows = deparse(facets), margins = margins)
##    }
##    if (!is.null(main))
##      p <- p + ggtitle(main)
##    for (g in geom) {
##      params <- lapply(consts, eval_tidy)
##      p <- p + do.call(paste0("geom_", g), params)
##    }
##    logv <- function(var) var %in% strsplit(log, "")[[1]]
##    if (logv("x"))
##      p <- p + scale_x_log10()
##    if (logv("y"))
##      p <- p + scale_y_log10()
##    if (!is.na(asp))
##      p <- p + theme(aspect.ratio = asp)
##    if (!missing(xlab))

```

```
##       p <- p + xlab(xlab)
##     if (!missing(ylab))
##       p <- p + ylab(ylab)
##     if (!missing(xlim) && !all(is.na(xlim)))
##       p <- p + xlim(xlim)
##     if (!missing(ylim) && !all(is.na(ylim)))
##       p <- p + ylim(ylim)
##     p
##   }
## <bytecode: 0x556951b4af70>
## <environment: namespace:ggplot2>
```