Problem4

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Problem 4

Question 4a, (2 points):

Find the names of the Pokemon which are taller then 2 meters and are Legendary.

(Hint: it's usually wise to first extract several columns of data to make sure your code does what you think it does.)

Provide these names with one name per line.

```
poke[poke$Height_m > 2 & poke$isLegendary == "True","Name"]
```

```
##  [1] "Moltres"   "Mewtwo"    "Entei"     "Suicune"   "Lugia"     "Ho-Oh"
##  [7] "Latios"    "Kyogre"    "Groudon"   "Rayquaza"  "Dialga"    "Palkia"
## [13] "Regigigas" "Giratina"  "Arceus"    "Cobalion"  "Virizion"  "Reshiram"
## [19] "Zekrom"    "Kyurem"    "Xerneas"   "Yveltal"   "Zygarde"
```

Question 4b, (6 points):

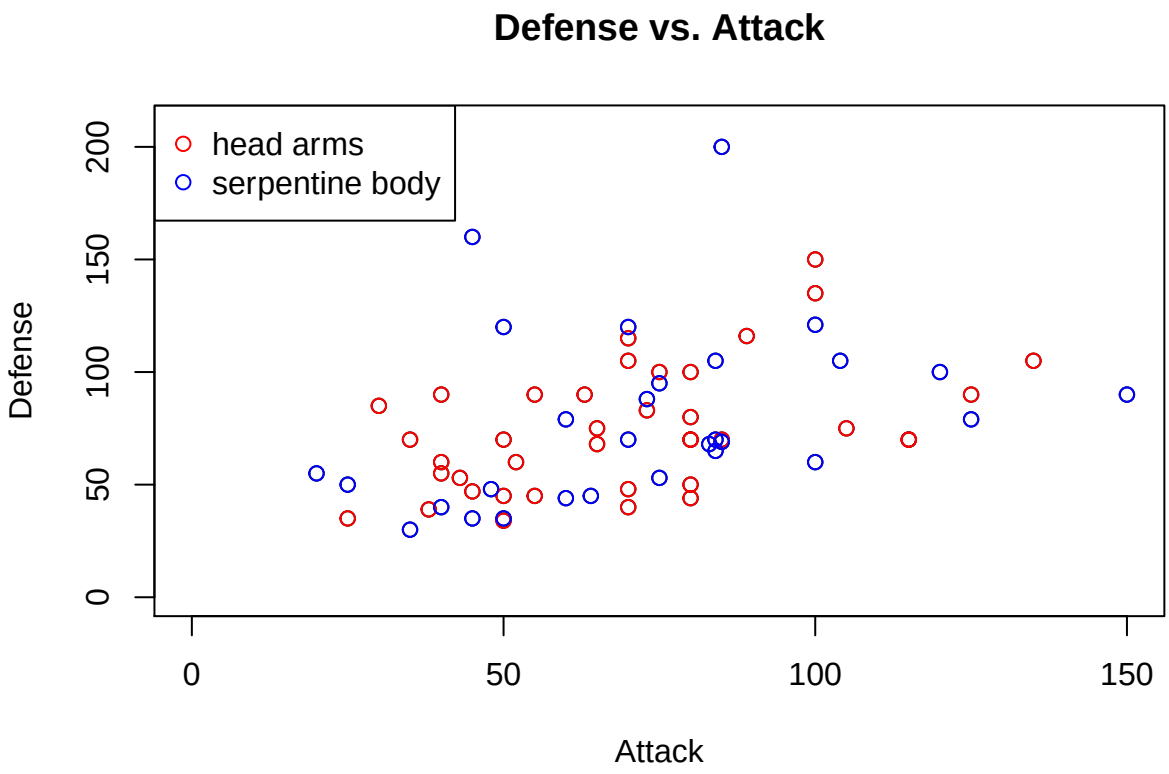
Let's extract two body styles of Pokemon. We'll restrict this question to just pokemon with two body styles: 'head_arms' and 'serpentine_body'.

Plot the Attack vs Defense of any Pokemon that has those body style (with 'head arms' on the x axis and 'serpentine body' on the y axis).

Upload a .pdf of this plot.

Hint: it's usually wise to first extract several columns of data to make sure your code does what you think it does. Here especially as you are using compound criteria.

```
sub_poke = poke[,c("Attack","Defense","Body_Style")]
df = sub_poke[sub_poke$Body_Style == "head_arms" | sub_poke$Body_Style == "serpentine_body",]
head_arms = sub_poke[sub_poke$Body_Style == "head_arms",]
serpentine_body = sub_poke[sub_poke$Body_Style == "serpentine_body",]
plot(df$Attack, df$Defense,
     main = "Defense vs. Attack",
     xlab = "Attack",
     ylab = "Defense",
     xlim = c(0,150),
     ylim = c(0,210))
points(head_arms, col="red")
points(serpentine_body, col="blue")
legend(x = "topleft", col = c("red","blue"), pch = c(1,1), c("head arms", "serpentine body"))
```


Defense vs. Attack
head arms
serpentine body
Defense
0
50
100
150
200
Attack
0
50
100
150