

Our simple program to begin.

After starting up your VM and running the update code (which downloads the file you need here), cut and paste the following block.

```
library(wordVectors)
library(magrittr)

vectors = read.binary.vectors("/texts/medical_vectors.bin",nrows = 50000)
vectors %>% nearest_to(vectors[["tumor"]],n = 10)
```

OK.

A much more complicated program, for later or for speed demons.

```
opposition_1 = vectors[["he"]] - vectors[["she"]]
opposition_2 = vectors[["america"]] - vectors[["england"]]

field_words = vectors %>% nearest_to(
  vectors[[c("dermatology","pediatrics","ophthalmology","psychology","histology")]],100
) %>% names

smaller_vectors = vectors %>% filter_to_rownames(field_words)

similarity_to_1 = smaller_vectors %>% cosineSimilarity(opposition_1)
similarity_to_2 = smaller_vectors %>% cosineSimilarity(opposition_2)

# We plot in white so the circles don't leave a mark

plot(x=similarity_to_1,y=similarity_to_2,col='white')

# And then use 'text' to actually write on the screen.

text(x=similarity_to_1,y=similarity_to_2,label=rownames(similarity_to_2))
```