

hw7

```
library(ggplot2)
```

```
## Warning: pakiet 'ggplot2' został zbudowany w wersji R 4.1.3
```

```
library(gganimate)
```

```
## Warning: pakiet 'gganimate' został zbudowany w wersji R 4.1.3
```

```
library(geomtextpath)
```

```
tree <- data.frame(  
  x = c(0,1.8,0.7,1.5,0.5,1.2,0,-1.2,-0.5,-1.5,-0.7,-1.8,0),  
  y = c(0,0,1,1,2,2,3,2,2,1,1,0,0),  
  z = c(1,2,3,4,5,6,7,8,9,10,11,12,13)  
)  
  
balls <- data.frame(  
  x = c(0.4, -0.1, -0.8, 0.7, 0.2,-0.5, 0.2),  
  y = c(0.2, 2.1, 0.4, 1.5, 0.9, 1.3, 2.5)  
)  
  
star <- data.frame(  
  x = c(1, 1.13, 1.25, 1.3, 2, 3, 2.8, 2.9, 2, 1.3, 1.45, 1.25, 1.15, 1.05, 0.85, 1, 1),  
  y = c(2.8, 3, 2.8, 3.08, 3.2, 3, 3.2, 3.4, 3.3, 3.15, 3.3, 3.3, 3.5, 3.3, 3.3, 3.1, 2.8)  
)  
  
t = seq(-0.7, 0.5, by=0.1)  
  
text1 <- data.frame(  
  x = t,  
  y = 1.75+1/10*(t+0.76)^2,  
  t = "Wesołych"  
)  
  
text2 <- data.frame(  
  x = t*1.7+0.4,  
  y = 1.2+1/10*(t*1.6-1)^2,  
  t = "Świąt"  
)  
  
ggplot(tree, aes(x,y)) +  
  geom_polygon(fill = "darkgreen") +  
  geom_polygon(data = star, aes(x,y))+  
  geom_point(data = balls, aes(x=x, y=y), size = 8, color = "darkred")+  
  geom_text(data = text1, aes(x=x, y=y, text=t), size = 12, color = "darkred")+  
  geom_text(data = text2, aes(x=x, y=y, text=t), size = 12, color = "darkred")
```

```

transition_reveal(z) +
geom_textline(data = text1, aes(x,y, colour = t, label = t), size = 8, color = "orange", )+
geom_textline(data = text2, aes(x,y, colour = t, label = t), size = 8, color = "orange")+
theme_minimal() +
theme(axis.title = element_blank(),
      axis.text = element_blank(),
      axis.ticks = element_blank(),
      axis.line = element_blank(),
      legend.position = "none")

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