

VishwasP_231057008_CodingProblemSet2

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```
checkEvent = function(stops)
{
  for (stop in 1:stops)
  {
    if (pass_on_bus > 0) {
      pass_on_bus = pass_on_bus - sum(sample(c(0, 1), pass_on_bus, replace = TRUE, prob = c(0.8, 0.2)))
      pass_on_bus = pass_on_bus + sample(0:2, size=1, prob = c(0.5, 0.4, 0.1))
    }
    return(pass_on_bus)
  }
}

nsimulations = 10000
stops = 10
pass_on_bus = 0
results = replicate(nsimulations, checkEvent(stops))
bus_probability = mean(results == 0)
bus_probability

## [1] 0.0567
```

R Markdown

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Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.