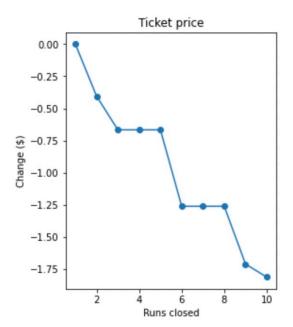
Big Mountain currently charges \$81 for an adult weekend ticket and the same for an adult weekday ticket. In order to increase profits, Big Mountain shortlisted four possible options and asked for analysis on each.

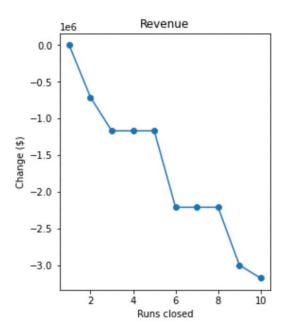
- 1. Permanently closing down up to 10 of the least used runs. This doesn't impact any other resort statistics.
- 2. Increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage
- 3. Same as number 2, but adding 2 acres of snow making cover
- 4. Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres

My analysis of each proposed action follows below:

1. Permanently closing down up to 10 of the least used runs. This doesn't impact any other resort statistics.

Given an expected number of visitors over the season is 350,000 and, on average, visitors ski for five days and assume the provided data includes the additional lift that Big Mountain recently installed, I find the following:





Closing 2 and 3 successively reduces support for ticket price and so revenue. If Big Mountain closes down 3 runs, it seems they may as well close down 4 or 5 as there's no further loss in ticket price. Increasing the

closures down to 6 or more leads to a large drop. Depending on the cost of operating each run, it may or may not be worth closing some.

2. Increase the vertical drop by adding a run to a point 150 feet lower down but requiring the installation of an additional chair lift to bring skiers back up, without additional snow making coverage

My model found that this scenario increases support for ticket price by \$8.61 over the season, this could be expected to amount to \$15065471.

3. Same as number 2, but adding 2 acres of snow making cover

My model found that this scenario increases support for ticket price by \$9.90. Over the season, this could be expected to amount to \$17322717

4. Increase the longest run by 0.2 mile to boast 3.5 miles length, requiring an additional snow making coverage of 4 acres

My model found no overall change in support for ticket price in this scenario. Therefor it is not recommended.