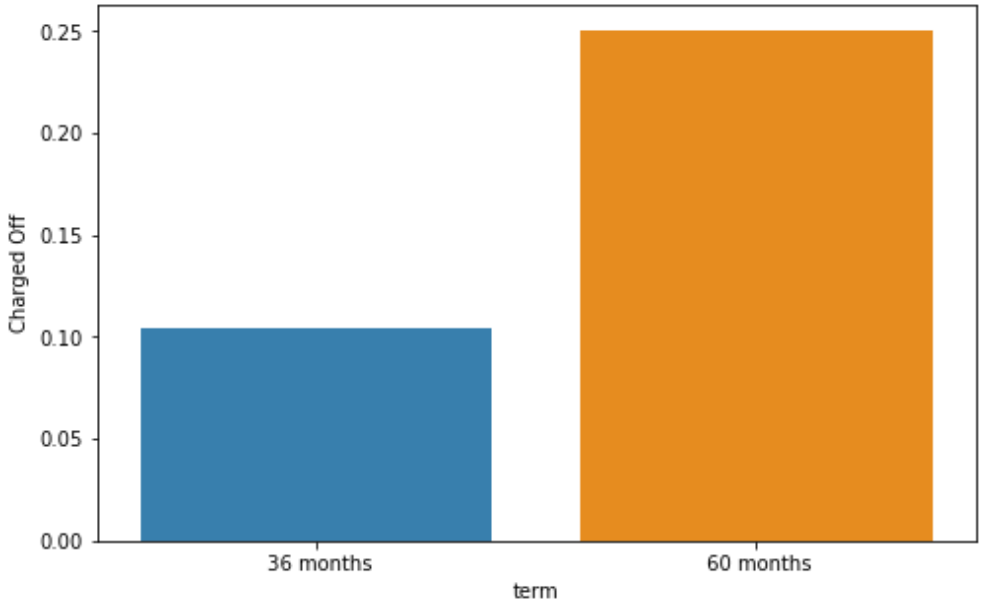
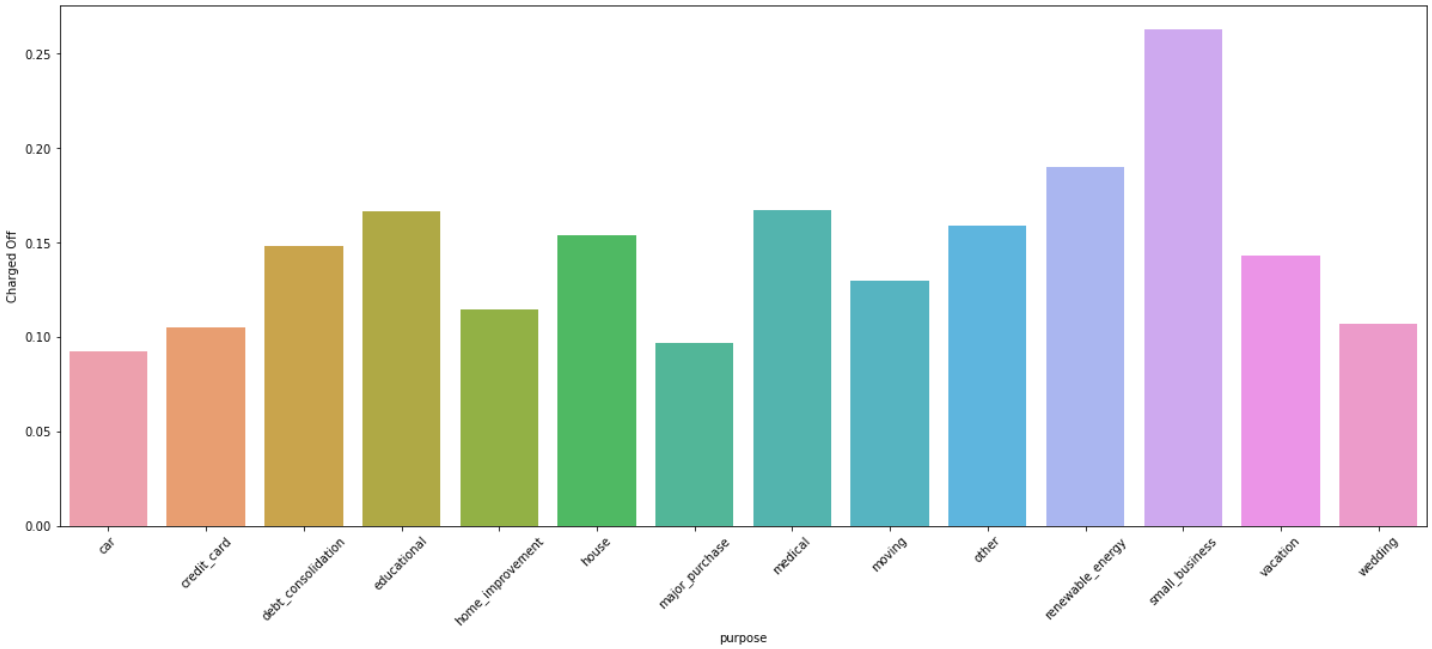
Conclusion 1

- The fig shows the chances of **default** across the "**term**" categories
- Ex: **at least 1 out of 4 loans** (25%) in "60 months" end up defaulting
- This helps the company to manage their portfolio by **not allocating a high number of loans** in the high risk **"60 month"** category



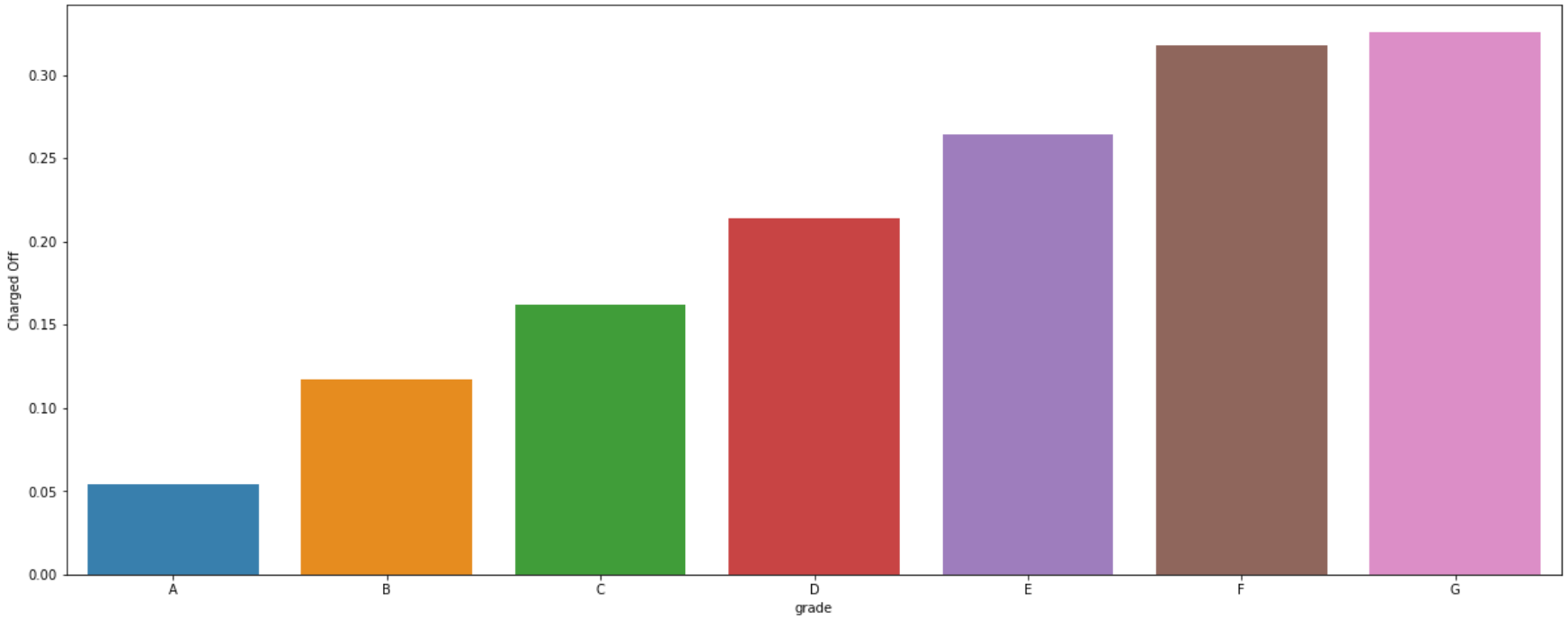
Conclusion 2

- The fig shows the chances of **default** across the "**purpose**" categories
- Ex: at least **1 out of 4 loans** (>25%) in "**small business**" end up defaulting
- This helps the company to manage their portfolio by **not allocating a high number of loans in the high risk "purpose" categories** like **"small business", "renewable energy".**



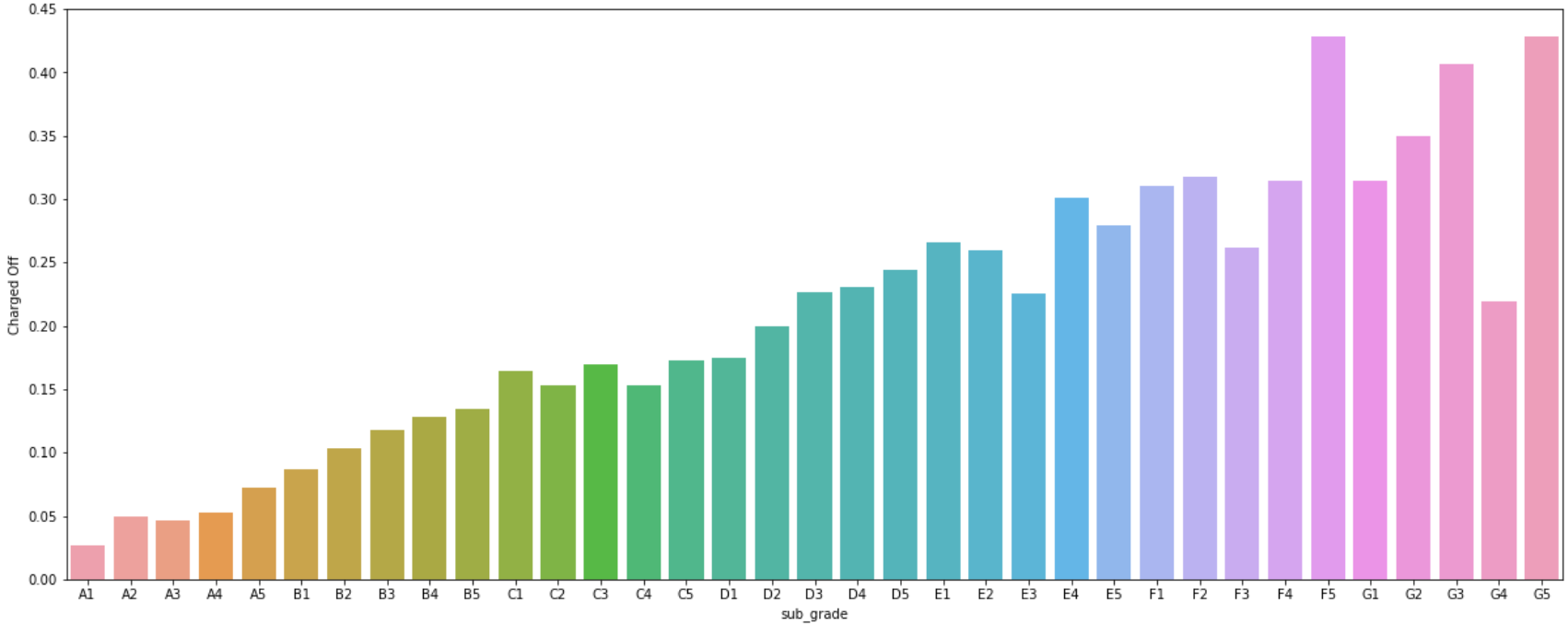
Conclusion 3

- The fig shows the chances of **default** across the "**grade**" categories
- Ex: **more than 30% of loans in grade G** end up defaulting
- This helps the company to manage their portfolio by **not allocating a high number of loans in the high risk "grade" categories** like **"G", "F"**



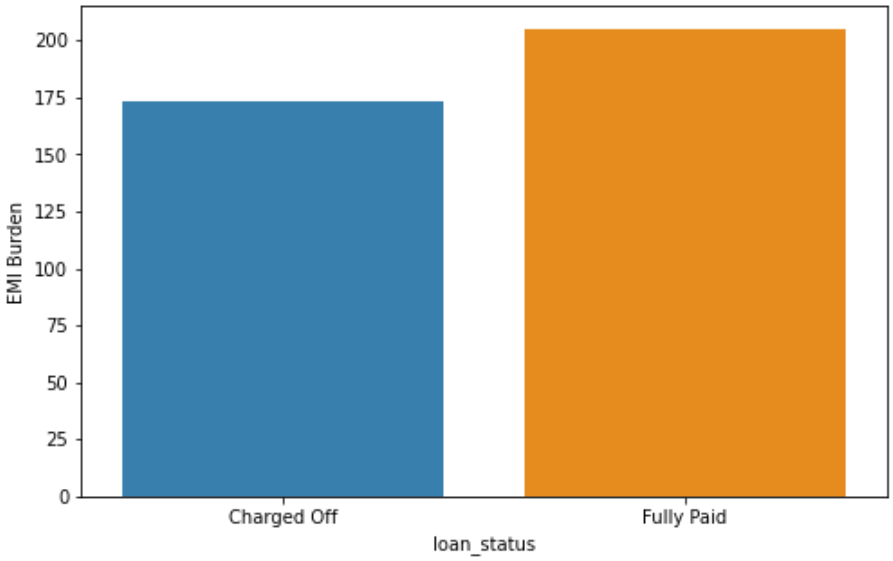
Conclusion 4

- The fig shows the chances of **default** across the "**sub_grade**" categories
- Ex: **more than 40% of loans** in "F5" & "G5" end up **defaulting**
- This helps the company to manage their portfolio by **not allocating a high number of loans in such high risk "sub_grade" categories**



Conclusion 5

- **Business Driven Metric – EMI_BURDEN**
- The medians of the calculated emi_burden are ”**173**” & “**205**” for “Charged Off & “Fully Paid” respectively.
- Fully paid loans **have much higher emi_burden** values than that of defaults
- This derived metric helps in predicting defaults at the time of approval
- **Note**: The metric must be used with caution. An increase/decrease in “annual_inc” during the term can greatly affect its importance



Recommendation 1:

- The fig shows median "**loan_amnt**" across "**addr_state**" categories, segmented by "**loan_status**"
- Ex: "loan_amnt" in the state "WY" has the following medians:
  - "Default" : **180000**, "Fully Paid" : **10375**
- The data can be used as **Recommended "loan_amnt"** for **consideration of approval** with a certain **threshold**
- Ex: For the state "WY", and a threshold of 10%,
  - **Acceptable "loan_amnt"** = 10375 + 10% of 10375

Recommendation 2:

- The fig shows the "**int_rate**" across "**addr_state**" categories, segmented by "**loan_status**"
- Ex: "int_rate" in the state "WY" has the following medians:
  - "Default" : **16.45**, "Fully Paid" : **12.61**
- The company can **use this data to determine "int_rate" for each state** and thereby **increase the overall success rate of the loans.**