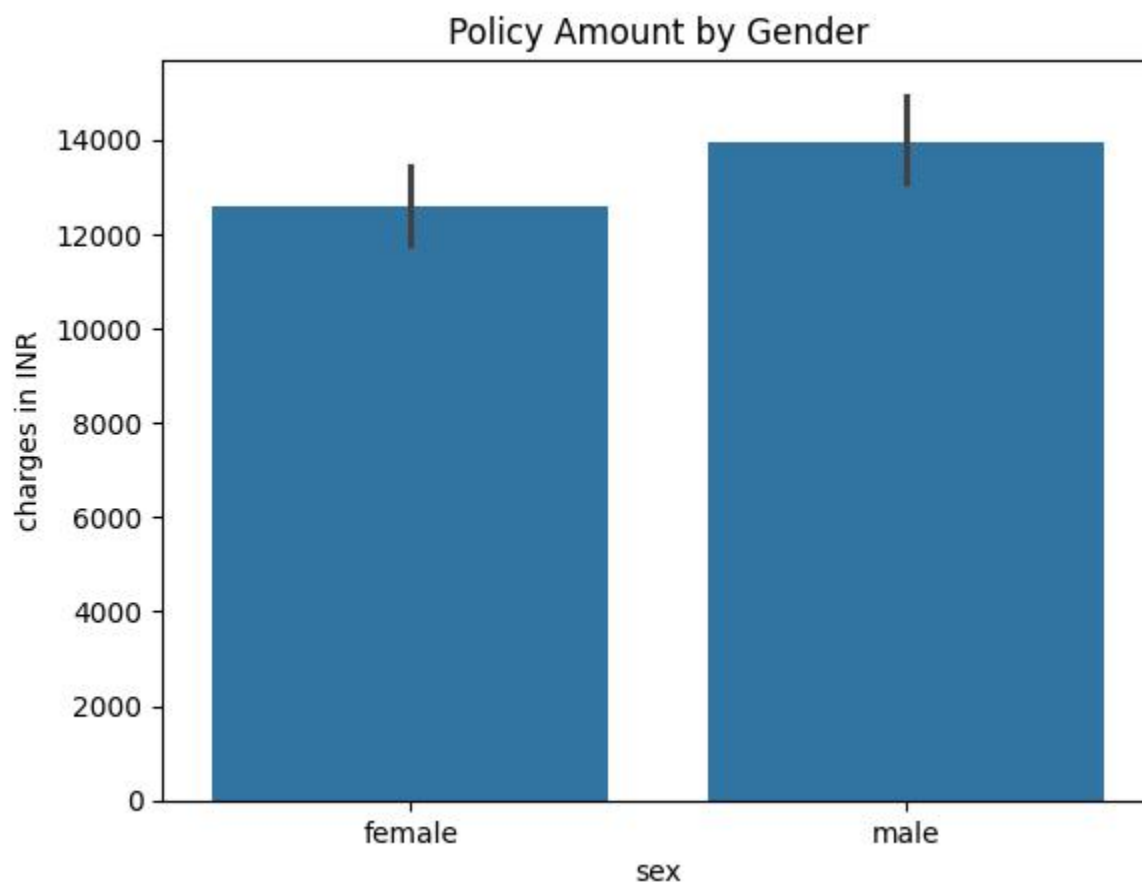


## EDA Report

### 1. Does the gender of the person matter for the company as a constraint for extending policies?

Yes



#### Average Policy Amount by Gender:

female 12569.578844

male 13956.751178

The average policy amount claimed by males is ₹13,956.75, while for females, it is ₹12,569.58. This suggests that:

1. Higher Claims by Males: On average, males claim higher amounts than females. The difference is approximately ₹1,387.17.

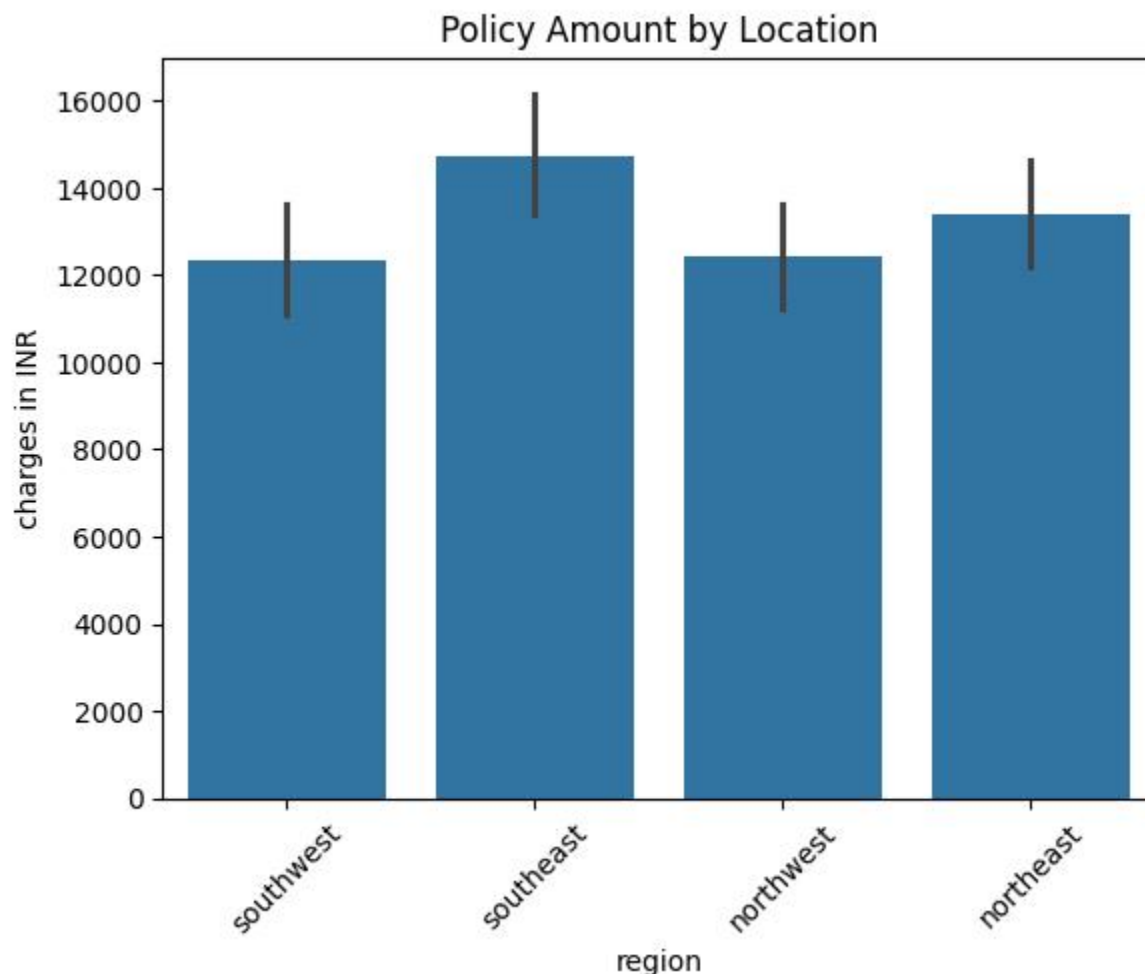
2. Possible Reasons: The higher claim amounts for males could be due to:

- Higher likelihood of engaging in activities or lifestyles that might lead to more health-related issues.
- Differences in health insurance requirements or medical expenses based on gender-specific health risks.

## 2. What is the average amount of money the company spent over each policy cover?

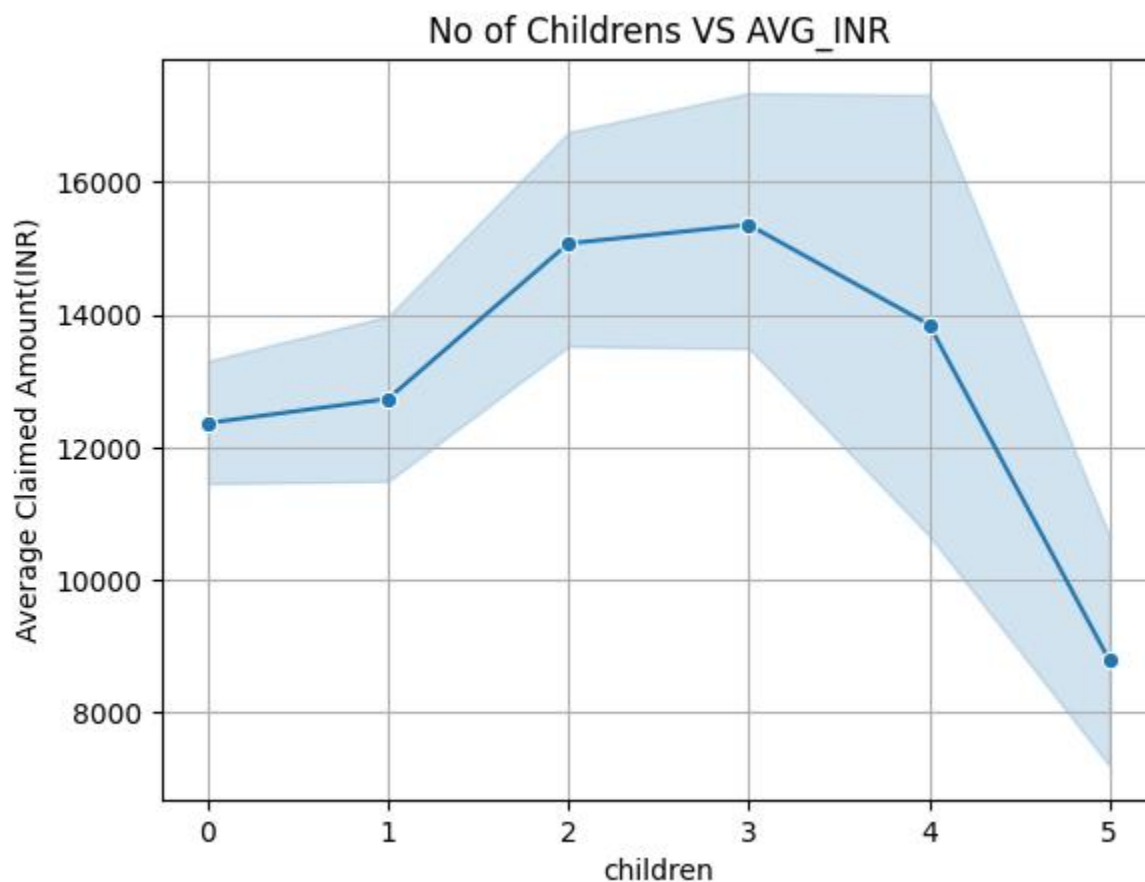
Average Policy Amount: 13270.42

## 3. Could you advise if the company needs to offer separate policies based upon the geographic location of the person?



- The policy charges in INR for different regions (southwest, southeast, northwest, northeast) appear to be relatively close to each other.
- No Need for Region-Specific Policies (Yet): Since policy amounts do not show a drastic difference by region, offering separate policies based on geography may not be necessary.

#### 4.Does the no. of dependents make a difference in the amount claimed?



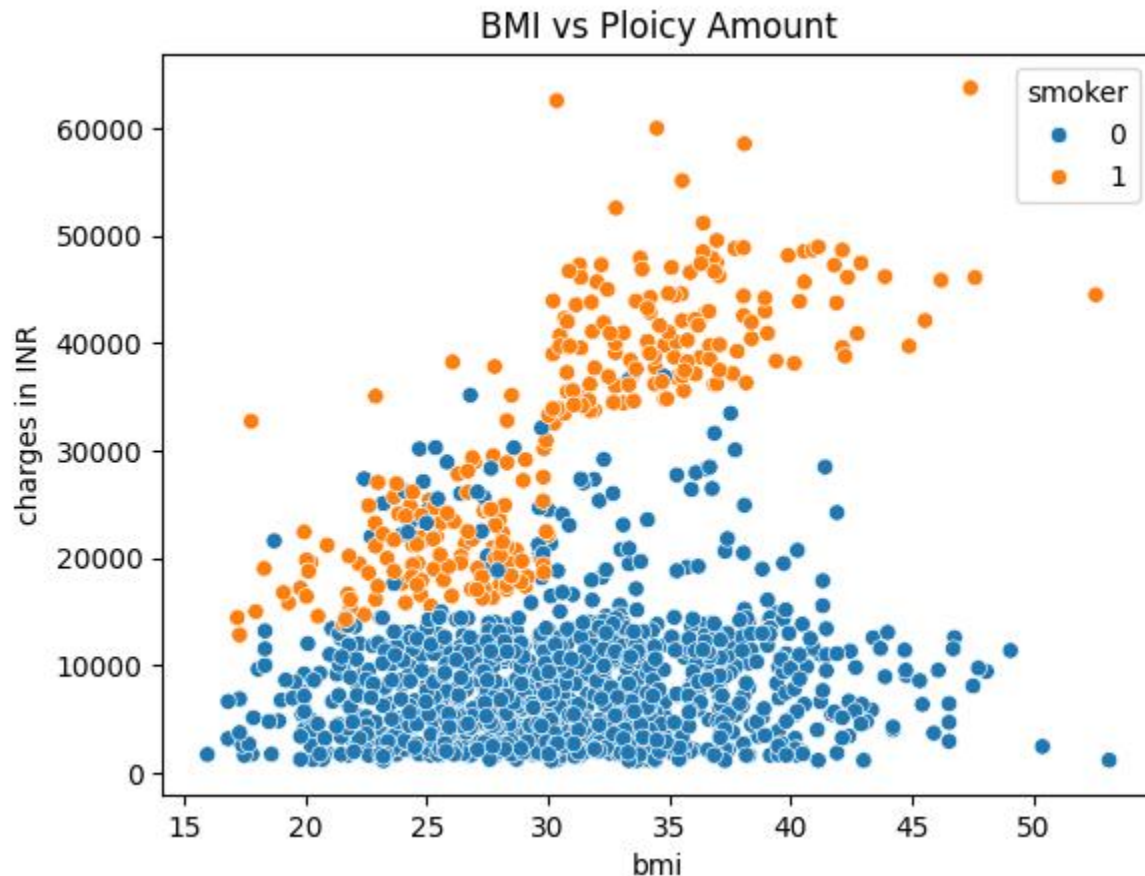
Yes, Number of Dependents Matters: The trend suggests that people with 0-3 children tend to claim higher amounts, whereas those with 4-5 children claim less.

Possible Policy Adjustments:

- Consider offering family-size-based insurance plans.

- Investigate why claim amounts decrease for families with 4+ children (policy limits, affordability, or different coverage needs).

## 5. Does a study of persons BMI get the company any idea for the insurance claim that it would extend?



- ☒ Risk-Based Pricing: The company can adjust policy premiums based on BMI, especially for smokers.
- ☒ Health-Focused Policies: Offering wellness programs for high-BMI customers (e.g., fitness incentives) could reduce long-term claims.
- ☒ Stricter Medical Screening: BMI, along with smoking status and other factors, can help refine risk assessment models for more accurate policy pricing.

Recommendation:

- The company should consider BMI as a key factor, but it should be combined with smoking status and other health metrics to design fair and effective insurance policies.

## **6. Is it needed for the company to understand whether the person covered is a smoker or a non-smoker?**

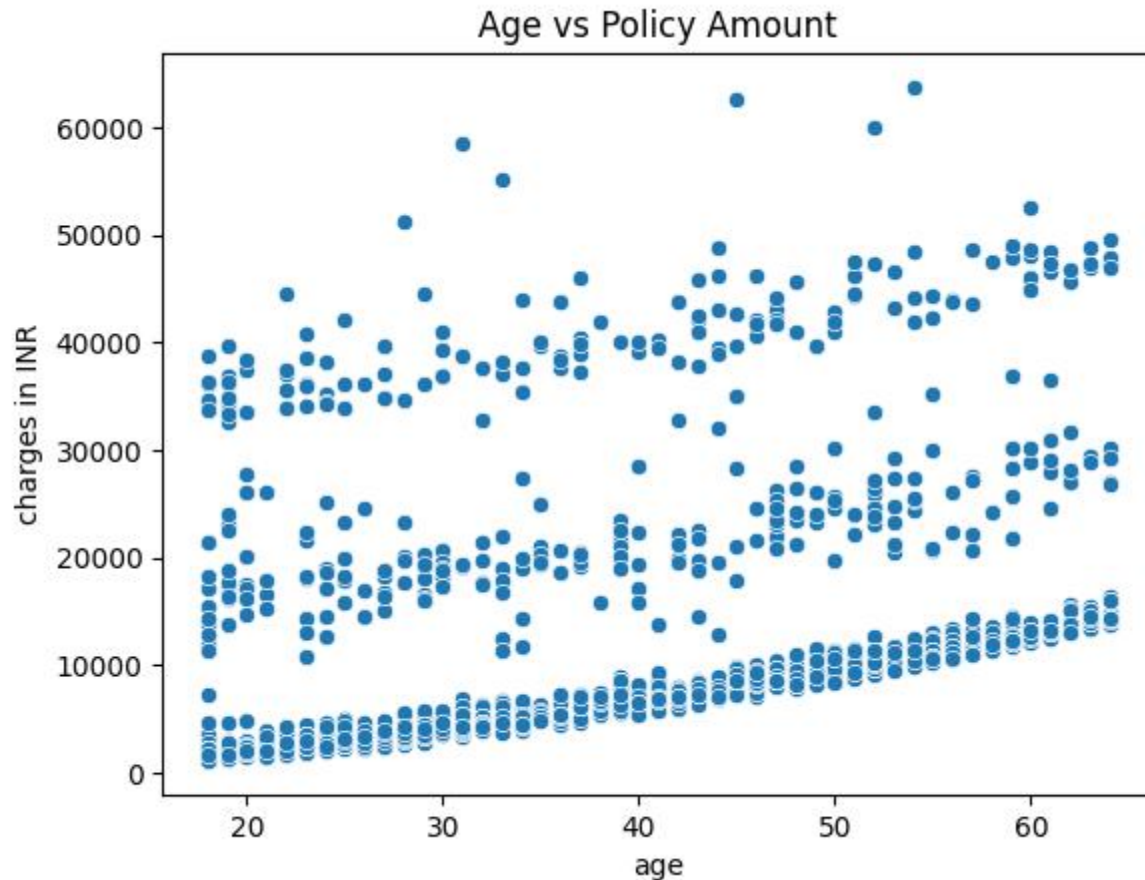
Yes, it is essential for the company to understand whether a person is a smoker or a non-smoker when determining insurance policy amounts.

**Non-Smokers (0):** Average policy amount = ₹8,434

**Smokers (1):** Average policy amount = ₹32,050 (almost **4 times higher** than non-smokers!)

## **7. Does age have any barrier on the insurance claimed?**

- The graph suggests that as age increases, the policy amount may vary, potentially indicating that age could influence the insurance claims or the amount of coverage provided.
- In general, age can be a significant factor in insurance policies. Older individuals might face higher premiums or reduced coverage amounts due to increased health risks and mortality rates. Conversely, younger individuals might receive more favorable terms. However, specific barriers or limitations would depend on the insurance provider's policies and the type of insurance being claimed.



## 8. Can the company extend certain discounts after checking the health status (BMI) in this case?

Yes, the company can extend discounts based on the health status (BMI), but it should do so carefully while considering other risk factors like smoking status.

Key Takeaways from the BMI vs. Policy Amount Plot:

1. Smokers vs. Non-Smokers:
  - Smokers (orange dots) have much higher policy amounts compared to non-smokers (blue dots), even at the same BMI level.
  - This suggests that BMI alone is not the only factor—smoking significantly increases insurance costs.
2. BMI and Insurance Claims:

- Moderate BMI (18.5 - 24.9): Generally lower insurance costs.
- Higher BMI (above 30): Increased policy amounts, but mostly due to additional health risks (heart disease, diabetes, etc.).
- Obese Smokers (BMI > 30 and smoker = 1): Extremely high claim amounts, making them high-risk customers.