Two-Way ANOVA table:

- **ANOVA Table**

Factor	F-value	p-value	Decision
Gender	3.64	0.0578	Fail to reject H_0
Status	633.83	< 0.0001	Reject H_0
Gender × Status	1.83	0.178	Fail to reject H_0

- **Hypotheses Tested**

1. **Main Effect of Gender**
    - **H_0**: Salary does not depend on Gender.
    - **H_1**: Salary depends on Gender.
    - **Result**: p = 0.0578 → **slightly above 0.05**, so we **fail to reject H_0**.
    - Interpretation: Gender alone does **not** have a statistically significant effect on salary at the 5% level.

2. **Main Effect of Status**
    - **H_0**: Salary does not depend on Status.
    - **H_1**: Salary depends on Status.
    - **Result**: p < 0.0001 → highly significant. We **reject H_0**.
    - Interpretation: Status (e.g., job level, employment category) has a **very strong effect** on salary.

3. **Interaction Effect (Gender × Status)**
    - **H_0**: There is no interaction between Gender and Status on Salary.
    - **H_1**: There is an interaction between Gender and Status on Salary.
    - **Result**: p = 0.178 → **greater than 0.05**, so we **fail to reject H_0**.
    - Interpretation: The effect of Status on Salary does **not depend on Gender** (no significant interaction).

- **Final Conclusion**

- **Status is the only significant factor** influencing Salary in this dataset.
- **Gender has no strong independent effect**, though the p-value (0.0578) is close to 0.05 → might suggest a weak trend.
- **No Gender × Status interaction** → meaning salary differences by status are consistent across genders.