


# BANK-STATEMENT-EXAMPLE-FREE BANK STATEMENT


## ML MODEL ANALYSIS

### Key Observations:

1. **Stable & Growing Income:**
    - **September: £1,010**
    - **October: £2,380**
    - **November: £2,030**
    - **Consistently high income is a positive indicator for loan approval.**
  2. **Manageable Debt-to-Income Ratio (DTI):**
    - **DTI is below critical risk levels.**
    - **September: 1.06%** (Low Risk)
    - **October: 0.23%** (Very Low Risk)
    - **November: 1.08%** (Low Risk)
    - **All values are below 40%, indicating strong financial stability.**
  3. **Savings Growth Trend:**
    - **October shows +99.08% savings growth → Very strong improvement.**
    - **November has -6.98% savings decline, but it remains within safe limits.**
    - **Overall, savings trend remains stable.**
  4. **Loan Decision:**
    -  **Loan approved in all three months.**
    - **Based on high income, controlled expenses, and positive savings trend.**
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## 3. Detailed Factor Analysis

### Factor 1: Income & Cash Flow


- **Stable Income Growth:**
    - Income grew from **£1,010 in September** to **£2,380 in October**.
    - **November remained steady at £2,030.**
    - **Verdict:  Strong income flow supports loan approval.**
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### Factor 2: Expenses & Spending Habits


- **Total Expenses:**
  - **September: £1,070.11**

- October: **£546.78** (Controlled)
  - November: **£2,184.59** (Higher, but manageable)
  - **Verdict:**  **Expenses are well-managed relative to income.**
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### Factor 3: Net Savings Trend

- **September → October: +99.08% savings growth.**
  - **October → November: -6.98% savings decline.**
  - **Verdict:**  **Positive trend overall, ensuring financial stability.**
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### Factor 4: Debt-to-Income Ratio (DTI)

- **September: 1.06% (Very Low Risk)**
  - **October: 0.23% (Extremely Low Risk)**
  - **November: 1.08% (Very Low Risk)**
  - **Verdict:**  **Very strong financial position for loan eligibility.**
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## 4. Loan Approval Model & Decision

- **Machine Learning Model Verdict:**  **Loan Approved** for all months.
  - **Primary reasons for approval:**
    - **Stable and growing income.**
    - **Low debt-to-income ratio.**
    - **Positive savings trend.**
    - **Manageable expenses.**
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## 5. Conclusion

 **Loan Approved Due to Strong Financial Stability** 

### **Key Takeaways:**

1. **Well-managed income and expenses support loan eligibility.**
2. **Low DTI and stable savings trends strengthen approval chances.**
3. **Future improvements:**
  - **Maintain positive savings growth to avoid decline.**

- Continue managing expenses below **70% of monthly income**.

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## ANALYSIS CONSIDERING DIFFERENT FACTORS

### Income & Cash Flow Analysis

Based on the transaction data:

- Total Income: £3,840.00
- Number of Income Transactions: 7
- Monthly Income Distribution:
  - September 2019: £50.00
  - October 2019: £1,750.00
  - November 2019: £2,040.00

### Conclusion:

1. Inconsistent Income Flow:
    - The income varies significantly from month to month.
    - September shows almost no income (£50), while October and November have higher credits.
    - This suggests either irregular earnings (e.g., freelancing or contract-based work) or sporadic deposits from external sources.
  2. Low Number of Transactions:
    - Only 7 income transactions over 3 months is relatively low.
    - If these are salary deposits, they should ideally be consistent and predictable.
    - A stable, recurring income pattern is preferable for loan eligibility.
  3. Potential Loan Risk:
    - Banks prefer steady, recurring income sources (e.g., monthly salaries).
    - The lack of income in September might indicate financial instability.
    - If this income is from freelance or business sources, additional proof of earnings (such as contracts or tax returns) may be required.
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