**Problem** 1:

The auditors of Audi Ltd. were provided with the following payment transactions. They were informed that the cheques between Sl. No. 843101 to 843121 were issued for payment. Identify if any cheque number is missing.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Voucher No** | **Date** | **Account Debited** | **Amount** | **Cheque No.** |
|
| 1 | 01-Apr-11 | Mohan | 400000 | 843107 |
| 2 | 01-Apr-11 | Bills Payable A/c | 40000 | 843118 |
| 3 | 01-Apr-11 | Furniture A/c | 500000 | 843121 |
| 4 | 02-Apr-11 | Mohan | 400000 | 843108 |
| 5 | 02-Apr-11 | Salary A/c | 3000 | 843116 |
| 6 | 02-Apr-11 | Rent A/c | 150000 | 843120 |
| 7 | 03-Apr-11 | Purchase A/c | 18000 | 843115 |
| 8 | 03-Apr-11 | Wages A/c | 200 | 843119 |
| 9 | 04-Apr-11 | Purchase A/c | 175000 | 843104 |
| 10 | 05-Apr-11 | Building A/c | 250000 | 843102 |
| 11 | 06-Apr-11 | Taxes Paid A/c | 45000 | 843110 |
| 12 | 08-Apr-11 | Stationery A/c | 2500 | 843114 |
| 13 | 09-Apr-11 | Sunita | 175000 | 843112 |
| 14 | 10-Apr-11 | Sunita | 3500 | 843101 |
| 15 | 10-Apr-11 | Bank Loan A/c | 171500 | 843109 |
| 16 | 12-Apr-11 | Commission Paid A/c | 10000 | 843117 |
| 17 | 15-Apr-11 | Investment A/c | 10000 | 843103 |
| 18 | 17-Apr-11 | Investment A/c | 10000 | 843106 |

You are required to find out whether any cheque number is missing.

**Problem 2:**

**Illustration 2:**

Mr. Kishan Lal is an auditor. He has planned to randomly select 20 transactions with different countries. The data has been produced below for your reference. You are required to help Mr. Kishan Lal in ascertaining:

1. total sales to different countries
2. selecting the stratafied random sample

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Order ID** | **Days** | **Product** | **Category** | **Country** | **Amount** |
| 1 | Wed | Carrots | Vegetables | Canada | $10,525 |
| 2 | Thu | Broccoli | Vegetables | France | $9,717 |
| 3 | Fri | Banana | Fruit | Canada | $4,742 |
| 4 | Sat | Banana | Fruit | Canada | $11,860 |
| 5 | Sun | Beans | Vegetables | Germany | $3,531 |
| 6 | Mon | Orange | Fruit | Canada | $1,548 |
| 7 | Tue | Broccoli | Vegetables | Australia | $11,540 |
| 8 | Wed | Banana | Fruit | New Zealand | $3,746 |
| 9 | Thu | Apple | Fruit | France | $5,904 |
| 10 | Fri | Apple | Fruit | Canada | $11,290 |
| 11 | Sat | Banana | Fruit | Germany | $2,981 |
| 12 | Sun | Broccoli | Vegetables | Canada | $11,758 |
| 13 | Mon | Carrots | Vegetables | Germany | $507 |
| 14 | Tue | Broccoli | Vegetables | Canada | $3,638 |
| 15 | Wed | Apple | Fruit | France | $9,651 |
| 16 | Thu | Banana | Fruit | France | $11,866 |
| 17 | Fri | Banana | Fruit | Canada | $105 |
| 18 | Sat | Banana | Fruit | France | $5,552 |
| 19 | Sun | Broccoli | Vegetables | France | $2,606 |
| 20 | Mon | Apple | Fruit | Canada | $6,904 |
| 21 | Tue | Orange | Fruit | France | $2,335 |
| 22 | Wed | Banana | Fruit | New Zealand | $1,832 |
| 23 | Thu | Banana | Fruit | Canada | $11,686 |
| 24 | Fri | Banana | Fruit | Canada | $11,046 |
| 25 | Sat | Beans | Vegetables | France | $11,005 |
| 26 | Sun | Carrots | Vegetables | Australia | $4,810 |
| 27 | Mon | Mango | Fruit | France | $8,601 |
| 28 | Tue | Beans | Vegetables | Canada | $8,154 |
| 29 | Wed | Beans | Vegetables | Germany | $3,350 |
| 30 | Thu | Apple | Fruit | France | $10,992 |
| 31 | Fri | Mango | Fruit | Canada | $6,291 |
| 32 | Sat | Apple | Fruit | Australia | $11,194 |
| 33 | Sun | Apple | Fruit | France | $8,504 |
| 34 | Mon | Broccoli | Vegetables | Germany | $8,568 |
| 35 | Tue | Apple | Fruit | France | $4,619 |
| 36 | Wed | Apple | Fruit | Australia | $5,643 |
| 37 | Thu | Apple | Fruit | Canada | $3,095 |
| 38 | Fri | Carrots | Vegetables | France | $11,880 |
| 39 | Sat | Banana | Fruit | Canada | $6,409 |
| 40 | Sun | Banana | Fruit | Canada | $7,740 |
| 41 | Mon | Orange | Fruit | Canada | $1,548 |
| 42 | Tue | Broccoli | Vegetables | Australia | $11,540 |
| 43 | Wed | Banana | Fruit | New Zealand | $3,746 |
| 44 | Thu | Apple | Fruit | France | $5,904 |
| 45 | Fri | Apple | Fruit | Canada | $11,290 |
| 46 | Sat | Banana | Fruit | Germany | $2,981 |
| 47 | Sun | Broccoli | Vegetables | Canada | $11,758 |
| 48 | Mon | Carrots | Vegetables | Germany | $507 |
| 49 | Tue | Broccoli | Vegetables | Canada | $3,638 |
| 50 | Wed | Apple | Fruit | France | $9,651 |

**Combining data from multiple sheets**

Assume that the exporter in the Illustration number 2 maintains monthly sales records on separate sheets. But you wish to combine them together to get an overall view. Consider the following data put on three different sheets

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sales of January on Sheet 1 | |  | Sales of February on Sheet 2 | |  | Sales of March on Sheet 3 | |
| **Country** | **Amount** |  | **Country** | **Amount** |  | **Country** | **Amount** |
| Canada | $21,940 |  | Canada | $8,073 |  | Canada | $10,525 |
| France | $16,325 |  | France | $18,700 |  | France | $9,717 |
| Canada | $75,759 |  | Canada | $6,641 |  | Canada | $4,742 |
| Canada | $111,154 |  | Canada | $24,313 |  | Canada | $11,860 |
| Germany | $72,665 |  | Germany | $20,511 |  | Germany | $3,531 |
| Canada | $61,401 |  | Canada | $7,897 |  | Canada | $1,548 |
| Australia | $77,626 |  | Australia | $24,952 |  | Australia | $11,540 |
| New Zealand | $37,797 |  | New Zealand | $6,653 |  | New Zealand | $3,746 |
| France | $31,883 |  | France | $16,809 |  | France | $5,904 |
| Canada | $54,619 |  | Canada | $23,728 |  | Canada | $11,290 |

**Illustration-4:** Manyata Ltd. allows its customers credit periods in the range of 10 days to 45 days. You are provided with the following details about its credit sales between August, 2017 and October, 2017. Enter the transactions in excel and make an aging schedule as per the following details:

1. According to month
2. Overdue between 0 -30 days, 31-60 days, 61 days and above

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sl. No. | Customer Name | Inovice Number | Tansaction Date | Due Date | Amount |
| 1 | Customer5 | INV104 | 27-08-17 | 25-09-17 | ₹ 5,673.00 |
| 2 | Customer3 | INV105 | 30-08-17 | 04-10-17 | ₹ 13,690.00 |
| 3 | Customer2 | INV105 | 02-09-17 | 25-09-17 | ₹ 11,451.00 |
| 4 | Customer2 | INV113 | 05-09-17 | 20-10-17 | ₹ 11,850.00 |
| 5 | Customer4 | INV115 | 08-09-17 | 24-09-17 | ₹ 5,064.00 |
| 6 | Customer10 | INV122 | 11-09-17 | 14-10-17 | ₹ 14,239.00 |
| 7 | Customer9 | INV123 | 14-09-17 | 27-10-17 | ₹ 5,648.00 |
| 8 | Customer4 | INV124 | 17-09-17 | 21-10-17 | ₹ 7,933.00 |
| 9 | Customer7 | INV126 | 20-09-17 | 14-10-17 | ₹ 13,138.00 |
| 10 | Customer2 | INV126 | 23-09-17 | 12-10-17 | ₹ 5,880.00 |
| 11 | Customer3 | INV129 | 26-09-17 | 08-10-17 | ₹ 9,878.00 |
| 12 | Customer5 | INV131 | 29-09-17 | 26-10-17 | ₹ 12,803.00 |
| 13 | Customer9 | INV138 | 02-10-17 | 03-11-17 | ₹ 13,833.00 |
| 14 | Customer8 | INV138 | 05-10-17 | 20-10-17 | ₹ 5,225.00 |
| 15 | Customer7 | INV144 | 08-10-17 | 05-11-17 | ₹ 9,478.00 |
| 16 | Customer8 | INV146 | 11-10-17 | 05-11-17 | ₹ 10,515.00 |
| 17 | Customer8 | INV147 | 14-10-17 | 09-11-17 | ₹ 6,054.00 |

**Illustration- 5:**  Shreshtha insurance company has a policy that it pays the claims of only those customers whose last premium is paid within a year. For such customers it pays 100% of the amount insured. However it also provides a grace period of 30 days. In case, the last premium paid is not within a year but within the grace period of 30 days, the company pays 60% of the insured amount. However a special authorization from senior executive is required in case either the settlement request is within the grace period or the amount of claim is above Rs.1000000. The executive officer allots a 5 digit alpha numeric code that is generated through a secret process after authorization. The authorization code is required to be entered by the dealing clerk in order to authorize the transaction. If the last premium payment exceeds the grace period the claims are rejected.

You are given the following details of policy number, persons insured, the sum insured, the date of last premium paid, the settlement date of the claims and list of the codes generated by senior executive. You are required to identify the claims:

1. That were to be rejected but paid
2. That were paid as per the payment policy of the firm
3. That were fraudulent/ unauthorized

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Policy No | Policy Holder | Sum Insured | Last premium date | Settlement date | List of Authoization codes entered | Amount Settled |
| Shre1043 | Mannat | 1180000 | 28-Mar-16 | 4-Aug-17 | BS601 | 1180000 |
| Shre1264 | Akash | 980000 | 5-Jul-15 | 10-Oct-16 | AB123 | 980000 |
| Shre1172 | Amit | 1750000 | 27-Mar-15 | 12-Apr-16 | TX940 | 1750000 |
| Shre1115 | Ram | 820000 | 10-Jun-16 | 24-Jul-16 |  | 820000 |
| Shre1939 | Mohan | 1230000 | 15-Aug-17 | 2-Oct-17 | KT260 | 1230000 |
| Shre1711 | Sita | 1880000 | 27-Nov-16 | 6-Feb-17 | YE965 | 1880000 |
| Shre1520 | Saoj | 300000 | 24-Dec-15 | 26-Jun-16 |  | 300000 |
| Shre1520 | Jannat | 1720000 | 29-Jul-16 | 3-Oct-16 | PU823 | 1720000 |
| Shre1492 | Satvik | 550000 | 19-Jan-16 | 17-Sep-16 |  | 550000 |
| Shre1883 | Shatru | 850000 | 5-Jun-16 | 6-May-17 |  | 850000 |
| Shre1046 | Sumit | 1860000 | 25-Feb-16 | 13-Apr-16 | SL426 | 1860000 |
| Shre1995 | Rakesh | 2000000 | 12-Apr-16 | 14-Oct-16 | OU241 | 2000000 |
| Shre1826 | Pamdit | 490000 | 16-Feb-17 | 12-May-17 |  | 490000 |
| Shre1380 | Rajiv | 1520000 | 28-Oct-15 | 24-Nov-16 | RZ791 | 912000 |
| Shre1612 | Harry | 510000 | 22-Nov-16 | 9-Sep-17 |  | 510000 |

The management provided the following list of codes that were generated during the period for valid settlements.

|  |
| --- |
| Codes Generated |
| KT260 |
| YE965 |
| VT925 |
| BS600 |
| PU823 |
| QG496 |
| WN218 |
| TX939 |
| SL426 |
| OU241 |
| EG942 |
| RZ791 |
| YV185 |
| JR621 |

**Problem 6**

A computer manufacturing plant produces mice, keyboards, and video game joysticks. The per-unit profit, per-unit labor usage, monthly demand, and per-unit machine-time usage are given in the following table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | **Mice** | **Keyboards** | | **Joysticks** | |
| Profit/unit | $8 | | | $11 | | $9 |
| Labor usage/unit | .2 hour | | | .3 hour | | .24 hour |
| Machine time/unit | .04 hour | | | .055 hour | | .04 hour |
| Monthly demand | 15,000 | | | 29,000 | | 11,000 |

**Problem 7**

Excel Ltd. produces three products mobile phones, laptops and television sets. Sale of one units results in a profit per unit of Rs.800, Rs.1500 and Rs.1000 respectively. There are three key inputs required to produce one unit of output labour, material and overhead expenses. The details are given as under:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Product | Mobile | Laptop | TV | Maximum Availability |
| Profit per unit | 800 | 1500 | 1000 | - |
| labour (in hours) | 2 | 5 | 3 | 700 Hrs. |
| Material (in units) | 15 | 25 | 20 | 4000 Units |
| Overhead expenses (Rs.) | 200 | 500 | 300 | Rs.60000 |

You are required to determine the product mix which maximizes the profit of the firm.