**QUESTION 5\_2**

**Code: Program 1**

/\*

\*

\* Task code generated by SAS Studio 3.8

\*

\* Generated on '1/11/22, 8:47 AM'

\* Generated by 'u45209732'

\* Generated on server 'ODAWS01-USW2.ODA.SAS.COM'

\* Generated on SAS platform 'Linux LIN X64 3.10.0-1062.9.1.el7.x86\_64'

\* Generated on SAS version '9.04.01M6P11072018'

\* Generated on browser 'Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/96.0.4664.110 Safari/537.36'

\* Generated on web client 'https://odamid-usw2.oda.sas.com/SASStudio/main?locale=en\_US&zone=GMT-05%253A00&https%3A%2F%2Fodamid-usw2.oda.sas.com%2FSASStudio%2Findex='

\*

\*/

**proc** **freq** data=WORK.TRAIN order=freq;

tables Policy\_Sales\_Channel / plots=(freqplot cumfreqplot);

weight Response;

**run**;

**Log: Program 1**

Notes (2)

1 OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;

72

73 /\*

74 \*

75 \* Task code generated by SAS Studio 3.8

76 \*

77 \* Generated on '1/11/22, 8:47 AM'

78 \* Generated by 'u45209732'

79 \* Generated on server 'ODAWS01-USW2.ODA.SAS.COM'

80 \* Generated on SAS platform 'Linux LIN X64 3.10.0-1062.9.1.el7.x86\_64'

81 \* Generated on SAS version '9.04.01M6P11072018'

82 \* Generated on browser 'Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)

82 ! Chrome/96.0.4664.110 Safari/537.36'

83 \* Generated on web client

83 ! 'https://odamid-usw2.oda.sas.com/SASStudio/main?locale=en\_US&zone=GMT-05%253A00&https%3A%2F%2Fodamid-usw2.oda.sas.com%2FS

83 ! ASStudio%2Findex='

84 \*

85 \*/

86

87 proc freq data=WORK.TRAIN order=freq;

88 tables Policy\_Sales\_Channel / plots=(freqplot cumfreqplot);

89 weight Response;

90 run;

NOTE: There were 381109 observations read from the data set WORK.TRAIN.

NOTE: PROCEDURE FREQ used (Total process time):

real time 0.63 seconds

user cpu time 0.40 seconds

system cpu time 0.04 seconds

memory 25427.81k

OS Memory 63672.00k

Timestamp 01/11/2022 01:48:52 PM

Step Count 96 Switch Count 3

Page Faults 0

Page Reclaims 4151

Page Swaps 0

Voluntary Context Switches 1258

Involuntary Context Switches 0

Block Input Operations 0

Block Output Operations 2512

91

92 OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;

104

**Results: Program 1**

| **Policy\_Sales\_Channel** | **Frequency** | **Percent** | **Cumulative Frequency** | **Cumulative Percent** |
| --- | --- | --- | --- | --- |
| **26** | 15891 | 34.02 | 15891 | 34.02 |
| **124** | 13996 | 29.96 | 29887 | 63.98 |
| **152** | 3858 | 8.26 | 33745 | 72.24 |
| **156** | 2297 | 4.92 | 36042 | 77.16 |
| **157** | 1794 | 3.84 | 37836 | 81.00 |
| **122** | 1720 | 3.68 | 39556 | 84.68 |
| **154** | 1474 | 3.16 | 41030 | 87.84 |
| **163** | 880 | 1.88 | 41910 | 89.72 |
| **160** | 475 | 1.02 | 42385 | 90.74 |
| **155** | 395 | 0.85 | 42780 | 91.59 |
| **25** | 369 | 0.79 | 43149 | 92.38 |
| **13** | 275 | 0.59 | 43424 | 92.97 |
| **55** | 189 | 0.40 | 43613 | 93.37 |
| **7** | 182 | 0.39 | 43795 | 93.76 |
| **31** | 160 | 0.34 | 43955 | 94.10 |
| **3** | 159 | 0.34 | 44114 | 94.44 |
| **30** | 156 | 0.33 | 44270 | 94.78 |
| **158** | 135 | 0.29 | 44405 | 95.07 |
| **12** | 132 | 0.28 | 44537 | 95.35 |
| **125** | 127 | 0.27 | 44664 | 95.62 |
| **8** | 125 | 0.27 | 44789 | 95.89 |
| **151** | 122 | 0.26 | 44911 | 96.15 |
| **52** | 115 | 0.25 | 45026 | 96.39 |
| **11** | 108 | 0.23 | 45134 | 96.63 |
| **29** | 106 | 0.23 | 45240 | 96.85 |
| **4** | 102 | 0.22 | 45342 | 97.07 |
| **24** | 99 | 0.21 | 45441 | 97.28 |
| **15** | 78 | 0.17 | 45519 | 97.45 |
| **150** | 76 | 0.16 | 45595 | 97.61 |
| **120** | 65 | 0.14 | 45660 | 97.75 |
| **14** | 63 | 0.13 | 45723 | 97.89 |
| **23** | 58 | 0.12 | 45781 | 98.01 |
| **61** | 56 | 0.12 | 45837 | 98.13 |
| **60** | 53 | 0.11 | 45890 | 98.24 |
| **10** | 50 | 0.11 | 45940 | 98.35 |
| **16** | 45 | 0.10 | 45985 | 98.45 |
| **136** | 40 | 0.09 | 46025 | 98.53 |
| **153** | 36 | 0.08 | 46061 | 98.61 |
| **1** | 35 | 0.07 | 46096 | 98.69 |
| **147** | 34 | 0.07 | 46130 | 98.76 |
| **91** | 29 | 0.06 | 46159 | 98.82 |
| **42** | 26 | 0.06 | 46185 | 98.88 |
| **59** | 25 | 0.05 | 46210 | 98.93 |
| **145** | 23 | 0.05 | 46233 | 98.98 |
| **109** | 21 | 0.04 | 46254 | 99.02 |
| **44** | 20 | 0.04 | 46274 | 99.07 |
| **19** | 19 | 0.04 | 46293 | 99.11 |
| **121** | 19 | 0.04 | 46312 | 99.15 |
| **22** | 18 | 0.04 | 46330 | 99.19 |
| **116** | 18 | 0.04 | 46348 | 99.23 |
| **9** | 17 | 0.04 | 46365 | 99.26 |
| **36** | 17 | 0.04 | 46382 | 99.30 |
| **54** | 16 | 0.03 | 46398 | 99.33 |
| **37** | 15 | 0.03 | 46413 | 99.36 |
| **131** | 14 | 0.03 | 46427 | 99.39 |
| **128** | 13 | 0.03 | 46440 | 99.42 |
| **139** | 13 | 0.03 | 46453 | 99.45 |
| **21** | 12 | 0.03 | 46465 | 99.48 |
| **56** | 12 | 0.03 | 46477 | 99.50 |
| **106** | 12 | 0.03 | 46489 | 99.53 |
| **138** | 12 | 0.03 | 46501 | 99.55 |
| **35** | 10 | 0.02 | 46511 | 99.57 |
| **94** | 9 | 0.02 | 46520 | 99.59 |
| **103** | 9 | 0.02 | 46529 | 99.61 |
| **111** | 9 | 0.02 | 46538 | 99.63 |
| **135** | 9 | 0.02 | 46547 | 99.65 |
| **47** | 8 | 0.02 | 46555 | 99.67 |
| **127** | 8 | 0.02 | 46563 | 99.69 |
| **148** | 8 | 0.02 | 46571 | 99.70 |
| **45** | 7 | 0.01 | 46578 | 99.72 |
| **53** | 7 | 0.01 | 46585 | 99.73 |
| **90** | 7 | 0.01 | 46592 | 99.75 |
| **113** | 7 | 0.01 | 46599 | 99.76 |
| **140** | 7 | 0.01 | 46606 | 99.78 |
| **18** | 6 | 0.01 | 46612 | 99.79 |
| **86** | 6 | 0.01 | 46618 | 99.80 |
| **64** | 5 | 0.01 | 46623 | 99.81 |
| **119** | 5 | 0.01 | 46628 | 99.82 |
| **65** | 4 | 0.01 | 46632 | 99.83 |
| **80** | 4 | 0.01 | 46636 | 99.84 |
| **81** | 4 | 0.01 | 46640 | 99.85 |
| **132** | 4 | 0.01 | 46644 | 99.86 |
| **133** | 4 | 0.01 | 46648 | 99.87 |
| **17** | 3 | 0.01 | 46651 | 99.87 |
| **20** | 3 | 0.01 | 46654 | 99.88 |
| **78** | 3 | 0.01 | 46657 | 99.89 |
| **92** | 3 | 0.01 | 46660 | 99.89 |
| **93** | 3 | 0.01 | 46663 | 99.90 |
| **114** | 3 | 0.01 | 46666 | 99.91 |
| **129** | 3 | 0.01 | 46669 | 99.91 |
| **32** | 2 | 0.00 | 46671 | 99.92 |
| **40** | 2 | 0.00 | 46673 | 99.92 |
| **49** | 2 | 0.00 | 46675 | 99.93 |
| **87** | 2 | 0.00 | 46677 | 99.93 |
| **88** | 2 | 0.00 | 46679 | 99.93 |
| **89** | 2 | 0.00 | 46681 | 99.94 |
| **100** | 2 | 0.00 | 46683 | 99.94 |
| **101** | 2 | 0.00 | 46685 | 99.95 |
| **107** | 2 | 0.00 | 46687 | 99.95 |
| **130** | 2 | 0.00 | 46689 | 99.96 |
| **2** | 1 | 0.00 | 46690 | 99.96 |
| **27** | 1 | 0.00 | 46691 | 99.96 |
| **28** | 1 | 0.00 | 46692 | 99.96 |
| **39** | 1 | 0.00 | 46693 | 99.96 |
| **43** | 1 | 0.00 | 46694 | 99.97 |
| **48** | 1 | 0.00 | 46695 | 99.97 |
| **51** | 1 | 0.00 | 46696 | 99.97 |
| **57** | 1 | 0.00 | 46697 | 99.97 |
| **58** | 1 | 0.00 | 46698 | 99.97 |
| **62** | 1 | 0.00 | 46699 | 99.98 |
| **63** | 1 | 0.00 | 46700 | 99.98 |
| **66** | 1 | 0.00 | 46701 | 99.98 |
| **68** | 1 | 0.00 | 46702 | 99.98 |
| **69** | 1 | 0.00 | 46703 | 99.99 |
| **73** | 1 | 0.00 | 46704 | 99.99 |
| **97** | 1 | 0.00 | 46705 | 99.99 |
| **98** | 1 | 0.00 | 46706 | 99.99 |
| **108** | 1 | 0.00 | 46707 | 99.99 |
| **110** | 1 | 0.00 | 46708 | 100.00 |
| **123** | 1 | 0.00 | 46709 | 100.00 |
| **159** | 1 | 0.00 | 46710 | 100.00 |

Application

Description automatically generated with medium confidence

Chart

Description automatically generated