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Data Article

Datasets on the statistical properties of the first 3000 squared positive integers

Hilary I. Okagbue [a,*], Muminu O. Adamu [b],
Pelumi E. Oguntunde [a], Abiodun A. Opanuga [a],
Ayodele A. Adebiyi [c], Sheila A. Bishop [a]

[a] Department of Mathematics, Covenant University, Canaanland, Ota, Nigeria
[b] Department of Mathematics, University of Lagos, Akoka, Lagos, Nigeria
[c] Department of Computer and Information Sciences, Covenant University, Canaanland, Ota, Nigeria

ARTICLE INFO

ABSTRACT

The data in this article are as a result of a quest to uncover alternative research routes of deepening researchers' understanding of integers apart from the traditional number theory approach. Hence, the article contains the statistical properties of the digits sum of the first 3000 squared positive integers. The data describes the various statistical tools applied to reveal different statistical and random nature of the digits sum of the first 3000 squared positive integers. Digits sum here implies the sum of all the digits that make up the individual integer.

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Specifications Table

Subject area	Mathematics
More specific subject area	Number Statistics, Computational number theory
Type of data	Tables and Figures

* Corresponding author.
  E-mail address: hilary.okagbue@covenantuniversity.edu.ng (H.I. Okagbue).

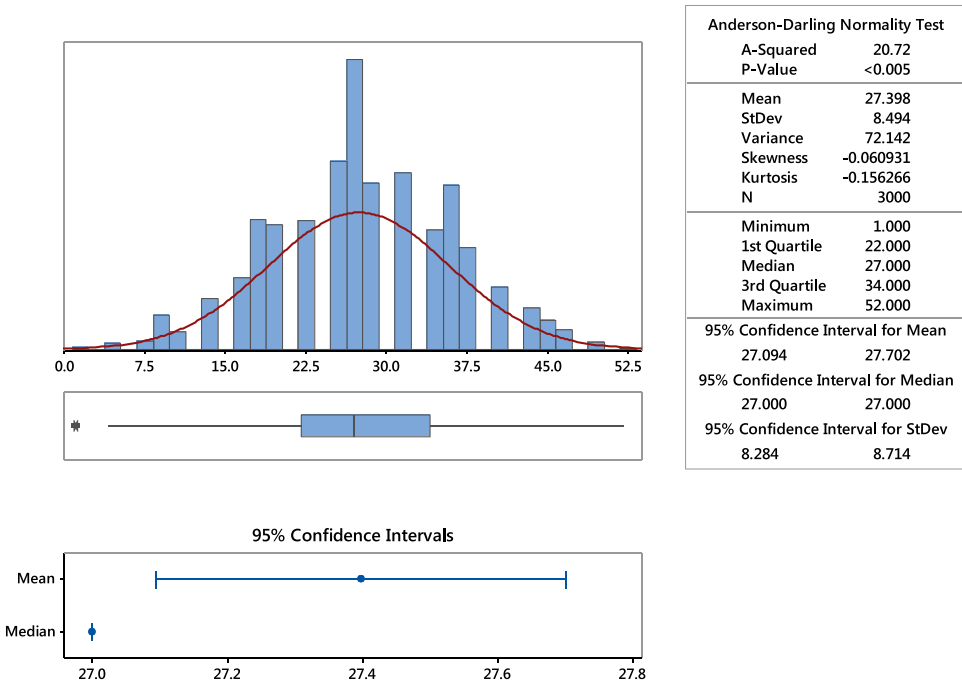| How data was acquired	The raw data is available in mathematical literature
Data format	Analyzed
Experimental factors	Zero and negative integers were not considered
Experimental features	Exploratory data analysis, mathematical computation
Data source location	Covenant University Mathematics Laboratory, Ota, Nigeria
Data accessibility	All the data are in this data article

Value of the data

- The data provides the exploratory statistics of digits sum of squared positive integers and their subsets.
- This technique of analysis can be used in data reduction.
- The data analysis can be applied to other known numbers.
- The data when completely analyzed can help deepen the understanding of the random nature of integers.

1. Data

The data provides a description of the statistical properties of the digits sum of the first 3000 squared positive integers and the subsets. The subsets are the even and odd positive integers. The subsets are equivalence and their descriptive statistics are summarized in Figs. 1–3:

Summary Report for Digits sum of squared positive integers

Anderson-Darling Normality Test	
A-Squared	20.72
P-Value	<0.005
Mean	27.398
StDev	8.494
Variance	72.142
Skewness	-0.060931
Kurtosis	-0.156266
N	3000
Minimum	1.000
1st Quartile	22.000
Median	27.000
3rd Quartile	34.000
Maximum	52.000

95% Confidence Interval for Mean
27.094   27.702
95% Confidence Interval for Median
27.000   27.000
95% Confidence Interval for StDev
8.284   8.714

Fig. 1. The summary statistics of the digits sum of squared positive integers. **Remark**: The gaps observed in the histogram are because the digits sum of squared positive integers cannot yield some numbers such as: 2, 3, 5, 6, 8, 11, 12, 14, 15 and so on.