Program Summary - Assignment 2_SAS.sas

Execution Environment

Author:	u63975320
File:	/home/u63975320/Somesh_Training/Assignment 2/Assignment 2_SAS.sas
SAS Platform:	Linux LIN X64 5.14.0-284.30.1.el9_2.x86_64
SAS Host:	ODAWS02-APSE1-2.ODA.SAS.COM
SAS Version:	9.04.01M7P08062020
SAS Locale:	en_US
Submission Time:	11/1/2024, 8:16:29 PM
Browser Host:	124.168.91.185
User Agent:	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/128.0.0.0 Safari/537.36 OPR/114.0.0.0
Application Server:	ODAMID00-APSE1-2.ODA.SAS.COM

Code: Assignment 2_SAS.sas

```sas
/*Please Highlight the code and run it as it is throwing errors if the entire code is not highlighted*/

libname Jewels "/home/u63975320/Somesh_Training";

/* Step 1:- Import the sheets into each of its datasets*/

/* Ruby Spreadsheet import starts here */

Proc import
    datafile="/home/u63975320/Somesh_Training/Assignment 2/Ruby_Olive_Jewellery.xlsx"
    dbms=xlsx
    out=Jewels.ruby_productandvariants_unduped
    replace;
    sheet="Merged_products_and_variants";
RUN;

Proc import
    datafile="/home/u63975320/Somesh_Training/Assignment 2/Ruby_Olive_Jewellery.xlsx"
    dbms=xlsx
    out=Jewels.ruby_Reviews_unsorted
    replace;
    sheet="Reviews";
RUN;

Proc import
    datafile="/home/u63975320/Somesh_Training/Assignment 2/Ruby_Olive_Jewellery.xlsx"
    dbms=xlsx
    out=Jewels.ruby_Product_Categories_unsorted
    replace;
    sheet="Product_Categories";

RUN;

/*Step 2:- Data Cleaning starts here*/

proc sort data=Jewels.ruby_Reviews_unsorted out=Jewels.ruby_Reviews;
by SHOPIFY_PRODUCT ;
run;

proc sort data=Jewels.ruby_productandvariants_unduped out=Jewels.ruby_productandvariants_unsorted nodupkey;
by SHOPIFY_VARIANT_ID ;
run;

proc sort data=Jewels.ruby_productandvariants_unsorted out=Jewels.ruby_productandvariants;
by SHOPIFY_PRODUCT_ID ;
run;

proc sort data=Jewels.ruby_Product_Categories_unsorted out=Jewels.ruby_Product_Categories;
by PRODUCT_ID ;
run;

proc contents data=Jewels.ruby_Reviews;
run;

data ruby_analysis;
    set Jewels.ruby_productandvariants (rename = (CREATED_AT=CREATED_AT_Products));
```

```sas
    merge
    Jewels.ruby_productandvariants Jewels.ruby_Product_Categories (rename = (PRODUCT_ID=SHOPIFY_PRODUCT_ID));
    by SHOPIFY_PRODUCT_ID;

    merge Jewels.ruby_productandvariants Jewels.ruby_Reviews (rename = (SHOPIFY_PRODUCT=SHOPIFY_PRODUCT_ID));
    by SHOPIFY_PRODUCT_ID;

    Drop OPTION_1_NAME  OPTION_1_VALUE  OPTION_2_NAME   OPTION_2_VALUE  OPTION_3_NAME   OPTION_3_VALUE
        POSITION SLUG DESCRIPTION TAGS BODY_HTML_TEXT URL IMAGE THUMB_DOWN_COUNT THUMB_UP_COUNT
        UPDATED_AT PUBLISHED_AT AUTHOR REPLY;

    Prices = input(price,comma10.2);
    BSR = input(BESTSELLER_RANK,comma10.0);
    if BSR = 0 then BSR = 1; /* Data error fix */

    Positions = input(POSITION,comma10.0);

    COMPARE_AT_PRICES = input(COMPARE_AT_PRICE,comma10.0);
    price_difference = COMPARE_AT_PRICE - prices;

    Discounted_Status = 0;
    If COMPARE_AT_PRICES = "nan" then Discounted_Status = 0;
    else Discounted_Status = 1;
    Discount = (price_difference/COMPARE_AT_PRICE)*100;

    Ratings = input(Rating,comma10.0);
    Created_At_Reviews=substr(compress(Created_At,"-"),1,8);

    REVIEW_COUNTS = input(REVIEW_COUNT,comma10.0);
    drop Review_count Category_slug Review_ID Created_at COMPARE_AT_PRICE price BESTSELLER_RANK POSITION Rating;

    Label
    COMPARE_AT_PRICES = "Old Price"
    Prices = "Final Price"
    GRAMS = "Weight in grams"
    AVAILABLE = "Stock Availability"
    SKU = "Stock ID"
    SHOPIFY_VARIANT_ID = "Shopify Variant ID"
    SHOPIFY_PRODUCT_ID = "Shopify Product ID"
    TITLE = "Title"
    TAXABLE = "Taxable"
    REQUIRES_SHIPPING = "Shipping Requirement"
    POSITION = "Position"
    NAME = "Name"
    SLUG = "URL Slug"
    DESCRIPTION = "Description"
    BODY_HTML_TEXT = "Detailed Description"
    VENDOR = "Vendor"
    PRODUCT_TYPE = "Product Type"
    TAGS = "Tags"
    BESTSELLER_RANK = "Bestseller Rank"
    BSR = "Bestseller Rank"
    Price_difference = "Price Difference"
    Discounted_status = "Discounted Status"
    Created_At_Reviews = "Review Published Date"
    CREATED_AT_Products = "Creation Date (Products)"
    CREATED_AT_reviews = "Creation Date (Reviews)"
    Body = "Review Description"
    REVIEW_COUNTS = "Review Count";
run;


/*Step 3:- Analysis Starts here*/


/* Type of data available for analysis */

ODS PDF file="/home/u63975320/Somesh_Training/Assignment 2/ SAS Assignment-2 Report.pdf" style=HTMLBlue contents=yes startpag
options nodate topmargin = 1 bottommargin = 1 leftmargin = 1 rightmargin = 1 center pageno=1;
ods noproctitle;
ods escapechar="^";

/*Idea for Table of content adjustment:- https://communities.sas.com/t5/SAS-Programming/ODS-PDF-report-Adjusting-position-of-
/*Idea for selective printing into Report:- https://communities.sas.com/t5/SAS-Studio/How-to-Show-First-Table-only-in-Proc-Co
/*Idea for exclusion from the report to avoid double coding:-https://documentation.sas.com/doc/en/pgmsascdc/9.4_3.5/odsug/p1b
/*Idea for page break control in ODS PDF Report:- https://communities.sas.com/t5/SAS-Programming/How-do-I-add-page-breaks-in-
```

```sas
ods pdf startpage=now;
ods pdf text="^S={just=center font_weight=bold font_size=16pt} Assignment 2";
ods pdf text="^S={just=center font_weight=bold font_size=20pt} Insights from Ruby Olive Jewellery Store Analysis";
ods pdf text="^S={just=center font_weight=bold font_size=14pt} 26777 Data Processing Using SAS - Spring 2024";
ods pdf text="^S={just=center font_weight=bold font_size=14pt} Somesh Shanbhag - 25525837";

run;


ods pdf startpage=now;
proc contents data=ruby_analysis order=varnum;
    Title "Variables and their Descriptions";
    ods select "varnum";
run;

ods exclude all;

/* Sales Volume */

Title "Total Sales volume per product type" ;
proc summary data=ruby_analysis printalltypes order=freq descending sum maxdec=2;
var prices;
class Product_type;
output out=sales_volume (drop= _type_)  sum=Total_value;
run;

ods select all;

ods pdf startpage=now;

Title "Total Sales volume per product type";
proc print data= sales_volume label noobs;
Label
    PRODUCT_TYPE = "Product Type"
    _FREQ_ = "Number of products per category"
    Total_value = "Sales volume";
Footnote justify=center "Explains the value of inventory and possible sales per category.";
run;

ods pdf startpage=now;

/* Sales Volume Graph*/
ods graphics / reset width=6.4in height=4.8in imagemap;
title  "Which product type on inventory can generate the highest sales volume?";
proc sgplot data=WORK.SALES_VOLUME noautolegend;
    vbar PRODUCT_TYPE / response=Total_value group=Total_value
        groupdisplay=cluster datalabel;
    yaxis grid;
footnote "Earrings category has the ability to generate the highest sales";
run;

ods graphics / reset;
/* Idea to Remove the auto legend from appearing:- https://communities.sas.com/t5/SAS-Programming/Removing-entire-legend/td-p,

ods pdf startpage=now;
/* Average Pricing */

proc univariate data=ruby_analysis plots freq ;
Title "Customer Spending Habits";
var prices;
ODS select "Quantiles" "Plots for Prices";
Footnote "From the inventory analysis, it is clear that most customers spend on average between $18 to $34 with $25 being the
run;

ods exclude all;


/* Product Ratings */

proc means data=ruby_analysis mean;
var ratings Review_Counts;
class product_type;
run;

ods select all;
ods pdf startpage=now;
```

```sas
proc print data=ruby_analysis noobs label;
Title "Products which received less than 4 rating";
var name ratings body vendor;
where ratings <= 3 AND ratings>0;
Label NAME = "Product Name"
      BODY = "Customer Reply"
      Vendor = "Vendor";
footnote "Both reported broken products are made in house but breakage rate is within acceptable margin of error.";
run;

ods exclude all;

proc freq data=ruby_analysis;
table ratings/nocum out=Ratings_for_products;
run;

ods pdf startpage=now;
ods select all;

proc print data=Ratings_for_products noobs label;
title "Total Ratings recieved for all products.";
where Ratings not is missing;
label
      Count = "Number of Products"
      Percent = "% of Total Products";
format
      Count 10.0
      Percent 10.2;
footnote1 "Rating system - 5 is best and 1 is the worst";
footnote2 "94% of products have a rating of 5";
run;

ods exclude all;

ods pdf startpage=now;

/* Bestseller ranking by product type*/

proc freq data=ruby_analysis ;
tables BSR*Product_type*prices/ list nocum out=BSR_rank;
run;

ods select all;

proc print data=BSR_rank (obs=16) noobs label;
Title "Top Selling product categories";
where BSR not is missing;
label BSR = "Bestseller Rank"
      PRODUCT_TYPE = "Product Type"
      Prices = "Price"
      COUNT= " Number of Products"
      PERCENT = "% of Total Products";
format
      Count 10.0
      Percent 10.2;
Footnote "From the table above, it is clear that Ruby Olive earrings are very popular among their customers.";
run;
ods pdf startpage=now;
/* Number of products on discount*/
proc format;
value discount_check
        1 = "Discounted"
        0 = "Full Price";
run;

proc freq data=ruby_analysis;
Title "Number of products on Discount";
tables Discounted_status/ nocum;
format Discounted_status discount_check.;
Footnote "Ruby Olive have 210 products on sale currently.";
run;

ods exclude all;
ods pdf startpage=now;
```

```sas
/*Discount by Product_type*/
proc summary data=ruby_analysis print mean maxdec=2 ;
var prices price_difference discount COMPARE_AT_PRICES;
class product_type;
where COMPARE_AT_PRICES not is missing;
output out=product_discounts;
run;

ods select all;
ods pdf startpage=now;

%let type = Bracelets and Bangles;
/*
Please choose from the following Options:-
    Bag Hook
    Bracelets and Bangles
    Brooches & Pins
    Earrings
    Gift Packs
    Lanyards
    Lens Cloth
    Necklaces
    Pet Products
    Puzzles
    Sale
*/

proc print data=product_discounts noobs label;
Title "Discount details for chosen product categories";
var PRODUCT_TYPE _FREQ_ COMPARE_AT_PRICES Prices  price_difference Discount  ;
where PRODUCT_TYPE not is missing AND _STAT_ = "MEAN" AND PRODUCT_TYPE = "&type";
Label
    _FREQ_ = "Number of Products"
    Prices = "Final Mean Price"
    COMPARE_AT_PRICES = "Old Mean Price"
    price_difference = "Price Difference"
    Discount = "Discount %";
format
    Prices 10.2
    price_difference 10.2
    Discount 10.2
    COMPARE_AT_PRICES 10.2;
Footnote "Designed to print discount details of any chosen product type using a macro.";
run;

ods pdf startpage=now;
/*Correlation between price and Bestseller ranking*/
ods graphics / reset width=6.4in height=4.8in imagemap;
Title "Checking the Correlation between price and Bestseller ranking";
proc sgplot data=WORK.RUBY_ANALYSIS;
    reg x=Prices y=BSR / nomarkers cli alpha=0.05;
    scatter x=Prices y=BSR /;
    xaxis grid;
    yaxis grid;
Footnote " ";
run;

ods graphics / reset;


ods graphics / reset width=6.4in height=4.8in imagemap;

ods pdf startpage=now;
/*Linear Regression to analyze best seller rankings*/

Title "Linear Regression to understand Bestseller Rankings";
proc glmselect data=WORK.RUBY_ANALYSIS outdesign(addinputvars)=Work.reg_design;
    class PRODUCT_TYPE AVAILABLE VENDOR TAXABLE / param=glm;
    model BSR=Prices Ratings REVIEW_COUNTS COMPARE_AT_PRICES Discounted_Status
```

Log: Assignment 2_SAS.sas

Warnings (7)

Notes (161)

```
      1          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
     69
     70          /*Please Highlight the code and run it as it is throwing errors if the entire code is not highlighted*/
     71
     72          libname Jewels "/home/u63975320/Somesh_Training";
NOTE: Libref JEWELS was successfully assigned as follows:
      Engine:        V9
      Physical Name: /home/u63975320/Somesh_Training
     73
     74          /* Step 1:- Import the sheets into each of its datasets*/
     75
     76          /* Ruby Spreadsheet import starts here */
     77
     78          Proc import
     79          datafile="/home/u63975320/Somesh_Training/Assignment 2/Ruby_Olive_Jewellery.xlsx"
     80          dbms=xlsx
     81          out=Jewels.ruby_productandvariants_unduped
     82          replace;
     83          sheet="Merged_products_and_variants";
     84          RUN;

NOTE: One or more variables were converted because the data type is not supported by the V9 engine. For more details, run with
      options MSGLEVEL=I.
NOTE: The import data set has 878 observations and 31 variables.
NOTE: JEWELS.RUBY_PRODUCTANDVARIANTS_UNDUPED data set was successfully created.
NOTE: PROCEDURE IMPORT used (Total process time):
      real time           0.40 seconds
      user cpu time       0.39 seconds
      system cpu time     0.01 seconds
      memory              4663.81k
      OS Memory           31496.00k
      Timestamp           11/01/2024 09:16:27 AM
      Step Count                    390  Switch Count  2
      Page Faults                   0
      Page Reclaims                 798
      Page Swaps                    0
      Voluntary Context Switches    64
      Involuntary Context Switches  4
      Block Input Operations        0
      Block Output Operations       4872


     85
     86          Proc import
     87          datafile="/home/u63975320/Somesh_Training/Assignment 2/Ruby_Olive_Jewellery.xlsx"
     88          dbms=xlsx
     89          out=Jewels.ruby_Reviews_unsorted
     90          replace;
     91          sheet="Reviews";
     92          RUN;

NOTE: One or more variables were converted because the data type is not supported by the V9 engine. For more details, run with
      options MSGLEVEL=I.
NOTE: The import data set has 1258 observations and 10 variables.
NOTE: JEWELS.RUBY_REVIEWS_UNSORTED data set was successfully created.
NOTE: PROCEDURE IMPORT used (Total process time):
      real time           0.20 seconds
      user cpu time       0.19 seconds
      system cpu time     0.00 seconds
      memory              4661.31k
      OS Memory           31496.00k
      Timestamp           11/01/2024 09:16:27 AM
      Step Count                    391  Switch Count  2
      Page Faults                   0
      Page Reclaims                 735
      Page Swaps                    0
      Voluntary Context Switches    64
      Involuntary Context Switches  4
      Block Input Operations        0
      Block Output Operations       3336


     93
     94          Proc import
     95          datafile="/home/u63975320/Somesh_Training/Assignment 2/Ruby_Olive_Jewellery.xlsx"
     96          dbms=xlsx
     97          out=Jewels.ruby_Product_Categories_unsorted
     98          replace;
     99          sheet="Product_Categories";
    100
    101          RUN;

NOTE: One or more variables were converted because the data type is not supported by the V9 engine. For more details, run with
      options MSGLEVEL=I.
NOTE: The import data set has 3122 observations and 2 variables.
```

```
NOTE: JEWELS.RUBY_PRODUCT_CATEGORIES_UNSORTED data set was successfully created.
NOTE: PROCEDURE IMPORT used (Total process time):
      real time            0.10 seconds
      user cpu time        0.10 seconds
      system cpu time      0.00 seconds
      memory               3501.78k
      OS Memory            30984.00k
      Timestamp            11/01/2024 09:16:27 AM
      Step Count                      392  Switch Count  2
      Page Faults                     0
      Page Reclaims                   665
      Page Swaps                      0
      Voluntary Context Switches      52
      Involuntary Context Switches    4
      Block Input Operations          0
      Block Output Operations         528


102
103      /*Step 2:- Data Cleaning starts here*/
104
105      proc sort data=Jewels.ruby_Reviews_unsorted out=Jewels.ruby_Reviews;
106      by SHOPIFY_PRODUCT ;
107      run;

NOTE: There were 1258 observations read from the data set JEWELS.RUBY_REVIEWS_UNSORTED.
NOTE: The data set JEWELS.RUBY_REVIEWS has 1258 observations and 10 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time            0.02 seconds
      user cpu time        0.00 seconds
      system cpu time      0.01 seconds
      memory               4607.71k
      OS Memory            31948.00k
      Timestamp            11/01/2024 09:16:27 AM
      Step Count                      393  Switch Count  1
      Page Faults                     0
      Page Reclaims                   781
      Page Swaps                      0
      Voluntary Context Switches      98
      Involuntary Context Switches    2
      Block Input Operations          0
      Block Output Operations         3344


108
109      proc sort data=Jewels.ruby_productandvariants_unduped out=Jewels.ruby_productandvariants_unsorted nodupkey;
110      by SHOPIFY_VARIANT_ID ;
111      run;

NOTE: There were 878 observations read from the data set JEWELS.RUBY_PRODUCTANDVARIANTS_UNDUPED.
NOTE: 79 observations with duplicate key values were deleted.
NOTE: The data set JEWELS.RUBY_PRODUCTANDVARIANTS_UNSORTED has 799 observations and 31 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time            0.02 seconds
      user cpu time        0.00 seconds
      system cpu time      0.00 seconds
      memory               5648.31k
      OS Memory            32976.00k
      Timestamp            11/01/2024 09:16:27 AM
      Step Count                      394  Switch Count  1
      Page Faults                     0
      Page Reclaims                   980
      Page Swaps                      0
      Voluntary Context Switches      118
      Involuntary Context Switches    1
      Block Input Operations          0
      Block Output Operations         4368


112
113      proc sort data=Jewels.ruby_productandvariants_unsorted out=Jewels.ruby_productandvariants;
114      by SHOPIFY_PRODUCT_ID ;
115      run;

NOTE: There were 799 observations read from the data set JEWELS.RUBY_PRODUCTANDVARIANTS_UNSORTED.
NOTE: The data set JEWELS.RUBY_PRODUCTANDVARIANTS has 799 observations and 31 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time            0.02 seconds
      user cpu time        0.00 seconds
      system cpu time      0.01 seconds
      memory               5648.31k
      OS Memory            32976.00k
      Timestamp            11/01/2024 09:16:27 AM
      Step Count                      395  Switch Count  1
      Page Faults                     0
      Page Reclaims                   926
```

```
                Page Swaps                        0
                Voluntary Context Switches       93
                Involuntary Context Switches      1
                Block Input Operations            0
                Block Output Operations        4368


116
117         proc sort data=Jewels.ruby_Product_Categories_unsorted out=Jewels.ruby_Product_Categories;
118         by PRODUCT_ID ;
119         run;

NOTE: There were 3122 observations read from the data set JEWELS.RUBY_PRODUCT_CATEGORIES_UNSORTED.
NOTE: The data set JEWELS.RUBY_PRODUCT_CATEGORIES has 3122 observations and 2 variables.
NOTE: PROCEDURE SORT used (Total process time):
                real time           0.01 seconds
                user cpu time       0.01 seconds
                system cpu time     0.00 seconds
                memory              1876.81k
                OS Memory           29636.00k
                Timestamp           11/01/2024 09:16:27 AM
                Step Count                      396   Switch Count  1
                Page Faults                       0
                Page Reclaims                   186
                Page Swaps                        0
                Voluntary Context Switches       48
                Involuntary Context Switches      0
                Block Input Operations            0
                Block Output Operations         528


120
121         proc contents data=Jewels.ruby_Reviews;
122         run;

NOTE: PROCEDURE CONTENTS used (Total process time):
                real time           0.03 seconds
                user cpu time       0.03 seconds
                system cpu time     0.00 seconds
                memory              3160.87k
                OS Memory           29624.00k
                Timestamp           11/01/2024 09:16:28 AM
                Step Count                      397   Switch Count  0
                Page Faults                       0
                Page Reclaims                   283
                Page Swaps                        0
                Voluntary Context Switches       11
                Involuntary Context Switches      1
                Block Input Operations            0
                Block Output Operations          16


123
124         data ruby_analysis;
125         set Jewels.ruby_productandvariants (rename = (CREATED_AT=CREATED_AT_Products));
126         merge
127         Jewels.ruby_productandvariants Jewels.ruby_Product_Categories (rename = (PRODUCT_ID=SHOPIFY_PRODUCT_ID));
128         by SHOPIFY_PRODUCT_ID;
129
130         merge Jewels.ruby_productandvariants Jewels.ruby_Reviews (rename = (SHOPIFY_PRODUCT=SHOPIFY_PRODUCT_ID));
131         by SHOPIFY_PRODUCT_ID;
132
133         Drop OPTION_1_NAMEOPTION_1_VALUEOPTION_2_NAMEOPTION_2_VALUEOPTION_3_NAMEOPTION_3_VALUE
134          POSITION SLUG DESCRIPTION TAGS BODY_HTML_TEXT URL IMAGE THUMB_DOWN_COUNT THUMB_UP_COUNT
135          UPDATED_AT PUBLISHED_AT AUTHOR REPLY;
136
137         Prices = input(price,comma10.2);
138         BSR = input(BESTSELLER_RANK,comma10.0);
139         if BSR = 0 then BSR = 1; /* Data error fix */
140
141         Positions = input(POSITION,comma10.0);
142
143         COMPARE_AT_PRICES = input(COMPARE_AT_PRICE,comma10.0);
144         price_difference = COMPARE_AT_PRICE - prices;
145
146         Discounted_Status = 0;
147         If COMPARE_AT_PRICES = "nan" then Discounted_Status = 0;
148         else Discounted_Status = 1;
149         Discount = (price_difference/COMPARE_AT_PRICE)*100;
150
151         Ratings = input(Rating,comma10.0);
152         Created_At_Reviews=substr(compress(Created_At,"-"),1,8);
153
154         REVIEW_COUNTS = input(REVIEW_COUNT,comma10.0);
155         drop Review_count Category_slug Review_ID Created_at COMPARE_AT_PRICE price BESTSELLER_RANK POSITION Rating;
156
```

```
157          Label
158          COMPARE_AT_PRICES = "Old Price"
159          Prices = "Final Price"
160          GRAMS = "Weight in grams"
161          AVAILABLE = "Stock Availability"
162          SKU= "Stock ID"
163          SHOPIFY_VARIANT_ID = "Shopify Variant ID"
164          SHOPIFY_PRODUCT_ID = "Shopify Product ID"
165          TITLE = "Title"
166          TAXABLE= "Taxable"
167          REQUIRES_SHIPPING = "Shipping Requirement"
168          POSITION = "Position"
169          NAME = "Name"
170          SLUG = "URL Slug"
171          DESCRIPTION = "Description"
172          BODY_HTML_TEXT = "Detailed Description"
173          VENDOR = "Vendor"
174          PRODUCT_TYPE = "Product Type"
175          TAGS = "Tags"
176          BESTSELLER_RANK= "Bestseller Rank"
177          BSR = "Bestseller Rank"
178          Price_difference = "Price Difference"
179          Discounted_status = "Discounted Status"
180          Created_At_Reviews = "Review Published Date"
181          CREATED_AT_Products = "Creation Date (Products)"
182          CREATED_AT_reviews = "Creation Date (Reviews)"
183          Body = "Review Description"
184          REVIEW_COUNTS = "Review Count";
185      run;
```

NOTE: Character values have been converted to numeric values at the places given by: (Line):(Column).
     144:21   147:25   149:31
WARNING: Multiple lengths were specified for the variable TITLE by input data set(s). This can cause truncation of data.
WARNING: Multiple lengths were specified for the variable CREATED_AT by input data set(s). This can cause truncation of data.
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.4-PINK SHOPIFY_VARIANT_ID=shva_43172711071907 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=, GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=1 AVAILABLE=NO OPTION_1_NAME=Colour OPTION_1_VALUE=Pink
OPTION_2_NAME=Size OPTION_2_VALUE=6.4cm OPTION_3_NAME= OPTION_3_VALUE= NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2019-12-10T01:08:57 CATEGORY_SLUG=all-jewellery FIRST.SHOPIFY_PRODUCT_ID=1
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=c9e69122-1bf7-4320-a443-a0c85fbab3e6 AUTHOR=Michael C. BODY=, REPLY= RATING=4 THUMB_UP_COUNT=0
THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=1 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=4
Created_At_Reviews=20191210 REVIEW_COUNTS=20 _ERROR_=1 _N_=1
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.6-PINK SHOPIFY_VARIANT_ID=shva_43172711104675 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Love these bangles! GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=2 AVAILABLE=YES OPTION_1_NAME=Colour
OPTION_1_VALUE=Pink OPTION_2_NAME=Size OPTION_2_VALUE=6.6cm OPTION_3_NAME= OPTION_3_VALUE= NAME=Everyday Single Bangles
SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-11-04T05:52:33 CATEGORY_SLUG=all-jewellery FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=5a383a0a-36e6-4ae5-a598-5d162c1e230f AUTHOR=Claire V.
BODY=I have a few of these bangles in all different colours. Great for colour blocking and the texture and real life colours are lov
ely. Service always great from Ruby Olive team 😊 REPLY= RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=2
COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20201104 REVIEW_COUNTS=20
ERROR=1 _N_=2
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.8-PINK SHOPIFY_VARIANT_ID=shva_43172711137443 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Beautiful bangles GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=3 AVAILABLE=YES OPTION_1_NAME=Colour OPTION_1_VALUE=Pink
OPTION_2_NAME=Size OPTION_2_VALUE=6.8cm OPTION_3_NAME= OPTION_3_VALUE= NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866

BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-08-22T03:05:43 CATEGORY_SLUG=all-products-full-price FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=c8e71ccf-e048-484b-9207-46bd20b1b0a1 AUTHOR=Susan M.
BODY=I just love these bangles! The 6.4cm diameter is great for small wrists! The colours are great and so easy to mix and match wit
h anything you wear. I've now almost got every colour on offer! ❤ REPLY= RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0
Prices=22 BSR=5 Positions=3 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5
Created_At_Reviews=20200822 REVIEW_COUNTS=20 _ERROR_=1 _N_=3
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-7-PINK SHOPIFY_VARIANT_ID=shva_43172711170211 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Infinite colour combos GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=4 AVAILABLE=NO OPTION_1_NAME=Colour
OPTION_1_VALUE=Pink OPTION_2_NAME=Size OPTION_2_VALUE=7cm OPTION_3_NAME= OPTION_3_VALUE= NAME=Everyday Single Bangles
SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-08-21T10:39:48 CATEGORY_SLUG=all-products-full-price FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=2b38dd9f-7ac3-474b-8064-432b5bfde916 AUTHOR=Rebecca B.
BODY=I have tiny hands and wrists but these are light enough that the small size won't make the great escape off my arm! I couldn
't stop at one, I ended up purchasing the whole rainbow! REPLY= RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5
Positions=4 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20200821
REVIEW_COUNTS=20 _ERROR_=1 _N_=4
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.4-GREEN SHOPIFY_VARIANT_ID=shva_43172711202979 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Yay! I can finally wear Ruby Olive Bangles! GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=5 AVAILABLE=YES
OPTION_1_NAME=Colour OPTION_1_VALUE=Green OPTION_2_NAME=Size OPTION_2_VALUE=6.4cm OPTION_3_NAME= OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-08-21T01:16:09 CATEGORY_SLUG=bangles-bracelets FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=b61db0e2-b2cc-4d2d-85b9-6f11cd202bba AUTHOR=Angela` M.
BODY=I've got small wrists but big knuckles so I found the regular sized bangle a squeeze to get on and torture to get off. I'm so h
appy there is a larger range now! I bought one in almost every colour and I can't wait to wear them. Thanks Ruby Olive! REPLY=
RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=5 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0
Discount=. Ratings=5 Created_At_Reviews=20200821 REVIEW_COUNTS=20 _ERROR_=1 _N_=5
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.6-GREEN SHOPIFY_VARIANT_ID=shva_43172711235747 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE= GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=6 AVAILABLE=YES OPTION_1_NAME=Colour OPTION_1_VALUE=Green
OPTION_2_NAME=Size OPTION_2_VALUE=6.6cm OPTION_3_NAME= OPTION_3_VALUE= NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-05-14T21:15:43 CATEGORY_SLUG=best-selling-gifts-for-best-friends
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=16c3e8b4-2adc-4fd5-b04f-149e6342c7ee AUTHOR=Melissa S.
BODY=Everyday Single Bangles (7 Colours Avail) REPLY= RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=6
COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20200514 REVIEW_COUNTS=20
ERROR=1 _N_=6
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.8-GREEN SHOPIFY_VARIANT_ID=shva_43172711268515 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=, GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=7 AVAILABLE=YES OPTION_1_NAME=Colour OPTION_1_VALUE=Green
OPTION_2_NAME=Size OPTION_2_VALUE=6.8cm OPTION_3_NAME= OPTION_3_VALUE= NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL= IMAGE= CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2019-12-10T01:08:57 CATEGORY_SLUG=best-selling-gifts-for-best-friends
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=c9e69122-1bf7-4320-a443-a0c85fbab3e6 AUTHOR=Michael C. BODY=, REPLY=
RATING=4 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=7 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0
Discount=. Ratings=4 Created_At_Reviews=20191210 REVIEW_COUNTS=20 _ERROR_=1 _N_=7
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.

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NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-7-GREEN SHOPIFY_VARIANT_ID=shva_43172711301283 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=, GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=8 AVAILABLE=NO OPTION_1_NAME=Colour OPTION_1_VALUE=Green
OPTION_2_NAME=Size OPTION_2_VALUE=7cm OPTION_3_NAME=  OPTION_3_VALUE=  NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2019-12-10T00:00:00 CATEGORY_SLUG=best-selling-gifts-for-bosses
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=9636df0e-d46c-4c02-b66d-5691a28d3e14 AUTHOR=Michael C. BODY=, REPLY=
RATING=4 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=8 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0
Discount=. Ratings=4 Created_At_Reviews=20191210 REVIEW_COUNTS=20 _ERROR_=1 _N_=8
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.4-LILACBLUE SHOPIFY_VARIANT_ID=shva_43172711334051
SHOPIFY_PRODUCT_ID=shpr_1294345928775 TITLE=Bangle Beauty GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=9 AVAILABLE=NO
OPTION_1_NAME=Colour OPTION_1_VALUE=Lilac Blue OPTION_2_NAME=Size OPTION_2_VALUE=6.4cm OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-08-22T23:08:02 CATEGORY_SLUG=best-selling-gifts-for-bosses
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=90080432-fecd-4944-a81c-7945807840fa AUTHOR=Tricia P.
BODY=Ruby Olive bangles add that pop of colour to complete any outfit. There are so many beautiful colours, you can't stop at one!!
REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=9 COMPARE_AT_PRICES=. price_difference=.
Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20200822 REVIEW_COUNTS=20 _ERROR_=1 _N_=9
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.6-LILACBLUE SHOPIFY_VARIANT_ID=shva_43172711366819
SHOPIFY_PRODUCT_ID=shpr_1294345928775 TITLE=Rainbow Arms GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=10 AVAILABLE=NO
OPTION_1_NAME=Colour OPTION_1_VALUE=Lilac Blue OPTION_2_NAME=Size OPTION_2_VALUE=6.6cm OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-09-14T05:17:01 CATEGORY_SLUG=best-selling-gifts-for-grandma
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=1036b8f1-04a8-46a1-bb08-1c58a2e19ae9 AUTHOR=Paula M.
BODY=Oh I love these.  There is one, two or more that go with my everyday wardrobe - so easy to pop on for a bit of color - look lov
ely solo but also light enough on your wrist when wearing several at once.  Good fun bangles. REPLY=  RATING=5 THUMB_UP_COUNT=0
THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=10 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5
Created_At_Reviews=20200914 REVIEW_COUNTS=20 _ERROR_=1 _N_=10
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.8-LILACBLUE SHOPIFY_VARIANT_ID=shva_43172711399587
SHOPIFY_PRODUCT_ID=shpr_1294345928775 TITLE=Simple e Beautiful GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=11 AVAILABLE=YES
OPTION_1_NAME=Colour OPTION_1_VALUE=Lilac Blue OPTION_2_NAME=Size OPTION_2_VALUE=6.8cm OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-09-24T04:23:03 CATEGORY_SLUG=best-selling-gifts-for-grandma
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=5ed28967-18e2-4a86-8722-50a866e0e92e AUTHOR=Vivian G.
BODY=I enjoy matching my bracelets with different outfits. REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5
Positions=11 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20200924
REVIEW_COUNTS=20 _ERROR_=1 _N_=11
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-7-LILACBLUE SHOPIFY_VARIANT_ID=shva_43172711432355
SHOPIFY_PRODUCT_ID=shpr_1294345928775 TITLE=Love the colour range GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=12
AVAILABLE=NO OPTION_1_NAME=Colour OPTION_1_VALUE=Lilac Blue OPTION_2_NAME=Size OPTION_2_VALUE=7cm OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
```

```
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2020-09-28T20:24:23 CATEGORY_SLUG=best-selling-gifts-for-sisters
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=ca36a40a-fffc-4c9e-8b5c-1716fa2798cd AUTHOR=Debbie L.
BODY=Love the fact I can mix and match my bangles with what I'm wearing.  The range of colour is wonderful and now so much easier to
 match with my necklaces. REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=12 COMPARE_AT_PRICES=.
price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20200928 REVIEW_COUNTS=20 _ERROR_=1 _N_=12
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.4-MINT SHOPIFY_VARIANT_ID=shva_43172711465123 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=I love these bangles .. mixing colours they GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=13 AVAILABLE=YES
OPTION_1_NAME=Colour OPTION_1_VALUE=Mint OPTION_2_NAME=Size OPTION_2_VALUE=6.4cm OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2023-11-24T14:46:40 CATEGORY_SLUG=best-selling-gifts-for-sisters
FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=35fe325f-8975-4f6d-b2a0-40747cf49a76 AUTHOR=Carolyn
BODY=Happy colours REPLY=  RATING=4 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=13 COMPARE_AT_PRICES=.
price_difference=. Discounted_Status=0 Discount=. Ratings=4 Created_At_Reviews=20231124 REVIEW_COUNTS=20 _ERROR_=1 _N_=13
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.6-MINT SHOPIFY_VARIANT_ID=shva_43172711497891 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=BANGLES GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=14 AVAILABLE=YES OPTION_1_NAME=Colour OPTION_1_VALUE=Mint
OPTION_2_NAME=Size OPTION_2_VALUE=6.6cm OPTION_3_NAME=  OPTION_3_VALUE=  NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2023-07-02T03:42:22 CATEGORY_SLUG=best-selling-products FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=bcac6bbb-8e4b-4f8c-96ce-5a81a773586e AUTHOR=JASMIN
BODY=LOVE, LOVE...LOVE these bangles, especially the colours and they are tough REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0
Prices=22 BSR=5 Positions=14 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5
Created_At_Reviews=20230702 REVIEW_COUNTS=20 _ERROR_=1 _N_=14
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-6.8-MINT SHOPIFY_VARIANT_ID=shva_43172711530659 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Gorgeous Colors Smooth Finishes & Clickitty GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=15 AVAILABLE=YES
OPTION_1_NAME=Colour OPTION_1_VALUE=Mint OPTION_2_NAME=Size OPTION_2_VALUE=6.8cm OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Everyday Single Bangles SLUG=everyday-single-bangles DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2021-03-09T00:23:27 CATEGORY_SLUG=best-selling-products FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=6be72d43-26bd-4541-a356-3a907cfb9ee7 AUTHOR=Tiffany I.B.W.U.
BODY=Adding to my RO collection. I love these bangles for their array of colors, smooth slickery finish and the special sound they m
ake when you wear them stacked together. Please continue to make them. Maybe with confetti or terrazzo looking bits? REPLY=
RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=15 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0
Discount=. Ratings=5 Created_At_Reviews=20210309 REVIEW_COUNTS=20 _ERROR_=1 _N_=15
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=22.00 COMPARE_AT_PRICE=nan SKU=RO2310BG-7-MINT SHOPIFY_VARIANT_ID=shva_43172711563427 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Quality bangle GRAMS=17 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=16 AVAILABLE=YES OPTION_1_NAME=Colour OPTION_1_VALUE=Mint
OPTION_2_NAME=Size OPTION_2_VALUE=7cm OPTION_3_NAME=  OPTION_3_VALUE=  NAME=Everyday Single Bangles SLUG=everyday-single-bangles
DESCRIPTION=
BODY_HTML_TEXT=Our Everyday Bangles are designed to wear....well...everyday! These gorgeous super smooth bangles are made of hand
 poured resin.MEASUREMENTSDiameters:6.4cm wide (approx.)6.6cm wide (approx.)6.8cm wide (approx.)7cm wide (approx.)Please note due
 to the handmade nature of these bangles please allow a discrepancy of 0.1cm above/below the chosen size.Weight: 17g VENDOR=4 Sizes
PRODUCT_TYPE=Bangles & Bracelets
TAGS=bangles-bracelets | best friend | black | boss | grandma | navy | red | single bangle | sister | type_bangles and bracelets | w
hite | yellow URL=  IMAGE=  CREATED_AT_Products=2018-04-11 05:48:19 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45062.053866
BESTSELLER_RANK=5 REVIEW_COUNT=20 CREATED_AT=2021-01-27T07:25:04 CATEGORY_SLUG=best-selling-products FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=976d7d37-ea3c-4b7b-b521-1f3a8efea14b AUTHOR=Sharon L.
BODY=I love this bangle. I'm building a collection of your bangles. They're so comfortable and not too big. Perfect sizing. Than
k you! REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=22 BSR=5 Positions=16 COMPARE_AT_PRICES=. price_difference=.
Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20210127 REVIEW_COUNTS=20 _ERROR_=1 _N_=16
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
```

```
PRICE=79.00 COMPARE_AT_PRICE=nan SKU=RO2352NK-MULTI SHOPIFY_VARIANT_ID=shva_12415273304135 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Great service GRAMS=110 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=1 AVAILABLE=NO OPTION_1_NAME=Title
OPTION_1_VALUE=Default Title OPTION_2_NAME=  OPTION_2_VALUE=  OPTION_3_NAME=  OPTION_3_VALUE=  NAME=Paradiso Short Artisan Necklace
SLUG=paradiso-short-artisan-necklace DESCRIPTION=
BODY_HTML_TEXT=A gorgeous collar of multicolour hand-poured artisan resin discs with a smooth matte finish. Flip the beads to find y
our perfect colour combo! Each and every piece is unique... we're one-of-a-kind, just like you!MEASUREMENTSNeck drop: 24-26cmWeight:
 110gWhat does 'Artisan' mean? Artisan means your new piece will be like a little piece of wearable art. We use the same colours fr
om the collection but each set will be slightly different (although they will match in terms of the colour tone). This is part of th
eir unique beauty.  VENDOR=Ruby Olive PRODUCT_TYPE=Necklaces
TAGS=artisan | best friend | boss | BoxingDaySale | collection_aurora | colour_multi | grandma | multi | multicolour | mum | necklac
es | new | nosas | sale | sas | short necklace | sister | startsat60 | statement necklace | type_necklaces URL=  IMAGE=
CREATED_AT_Products=2018-07-30 06:33:02 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=45140.977928 BESTSELLER_RANK=53 REVIEW_COUNT=10
CREATED_AT=2021-01-05T01:03:53 CATEGORY_SLUG=black FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0
REVIEW_ID=e0ea10f0-13aa-4491-9ea7-cb0df2d9bc83 AUTHOR=Christine C.
BODY=The lovely bangles were the highlight of our northern beaches lockdown. Looking forward to eventually wearing them!  Many thank
s REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=79 BSR=53 Positions=1 COMPARE_AT_PRICES=. price_difference=.
Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20210105 REVIEW_COUNTS=10 _ERROR_=1 _N_=17
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=5.00 COMPARE_AT_PRICE=nan SKU=ERBACK-SET3 SHOPIFY_VARIANT_ID=shva_13549203259463 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Bangles bangles bangles GRAMS=6 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=1 AVAILABLE=YES OPTION_1_NAME=Type
OPTION_1_VALUE=Stud Backings OPTION_2_NAME=  OPTION_2_VALUE=  OPTION_3_NAME=  OPTION_3_VALUE=  NAME=Earring Backings - Stud
SLUG=earring-backings DESCRIPTION=
BODY_HTML_TEXT=Always losing fiddly little earring backings? We hear you, and we've got you covered! Grab some spares so that you'
ll never be missing one. Stud backings includes 3 pairs of premium earring backings.  VENDOR=Jewel Care PRODUCT_TYPE=Earrings
TAGS=birthday | eofy | nosas | rofrenzy | sas | startsat60 URL=  IMAGE=  CREATED_AT_Products=2018-10-04 03:51:38
UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=44227.965266 BESTSELLER_RANK=17 REVIEW_COUNT=10 CREATED_AT=2020-11-06T20:33:48
CATEGORY_SLUG=everyday FIRST.SHOPIFY_PRODUCT_ID=0 LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=e66afdf8-e931-4657-8772-8c1e3ce05883
AUTHOR=Sabrina
BODY=I love a good bangle stack and these bangles are my go to. I love to stack 2,3 or 4 different bangles that compliment my outfit
.  I adore the finish to these bangles and how each one is somewhat individual due to its handmade nature.  The bangles are just per
fect. REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=5 BSR=17 Positions=1 COMPARE_AT_PRICES=. price_difference=.
Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20201106 REVIEW_COUNTS=10 _ERROR_=1 _N_=18
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
PRICE=15.95 COMPARE_AT_PRICE=nan SKU=DD1801SP-WHITE SHOPIFY_VARIANT_ID=shva_13613226983495 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Love these bangles! GRAMS=14 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=2 AVAILABLE=YES OPTION_1_NAME=Pack Type
OPTION_1_VALUE=Standard Pouch (60 Patches) OPTION_2_NAME=  OPTION_2_VALUE=  OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Dangle Dots Support Patches SLUG=dangle-dots DESCRIPTION=
BODY_HTML_TEXT=EACH PACK HAS 60 INVISIBLE SUPPORT PATCHES Instantly increases the comfort of heavier earrings and supports damaged
 and stretched earlobes.Regularly wearing large or heavy earrings can not only cause discomfort and strain, but can also cause earlo
bes to tear or stretch. Dangle Dots provide instant relief from pressure and tearing and are super easy to apply. They are worn invi
sibly at the back of the earlobe in order to bear the weight of your earring. Please note: due to the single use nature of our Dang
le Dots, they are not eligible for change of mind returns due to hygiene reasons.  VENDOR=Dangle Dots PRODUCT_TYPE=Earrings
TAGS=20ALL | afterpayday | birthday | BOGO | boss | eofy | FREEGIFT99 | mainevent | mayhem | noreturn | rofrenzy | SANDS | sas | sta
rtsat60 | tagged:new URL=  IMAGE=  CREATED_AT_Products=2018-10-12 07:04:12 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=43385.297199
BESTSELLER_RANK=0 REVIEW_COUNT=10 CREATED_AT=2020-11-04T05:52:33 CATEGORY_SLUG=everyday FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=5a383a0a-36e6-4ae5-a598-5d162c1e230f AUTHOR=Claire V.
BODY=I have a few of these bangles in all different colours. Great for colour blocking and the texture and real life colours are lov
ely. Service always great from Ruby Olive team 😊 REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=15.95 BSR=1
Positions=2 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20201104
REVIEW_COUNTS=10 _ERROR_=1 _N_=19
NOTE: Invalid argument to function INPUT at line 143 column 22.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 144 column 21.
NOTE: Invalid numeric data, 'nan' , at line 147 column 25.
NOTE: Invalid numeric data, COMPARE_AT_PRICE='nan' , at line 149 column 31.
WARNING: Limit set by ERRORS= option reached.  Further errors of this type will not be printed.
PRICE=15.95 COMPARE_AT_PRICE=nan SKU=DD1801SP-MULTI SHOPIFY_VARIANT_ID=shva_35593258336419 SHOPIFY_PRODUCT_ID=shpr_1294345928775
TITLE=Beautiful, will buy more! GRAMS=14 TAXABLE=YES REQUIRES_SHIPPING=YES POSITION=1 AVAILABLE=YES OPTION_1_NAME=Pack Type
OPTION_1_VALUE=RO x DD Pouch (60 Patches) OPTION_2_NAME=  OPTION_2_VALUE=  OPTION_3_NAME=  OPTION_3_VALUE=
NAME=Dangle Dots Support Patches SLUG=dangle-dots DESCRIPTION=
BODY_HTML_TEXT=EACH PACK HAS 60 INVISIBLE SUPPORT PATCHES Instantly increases the comfort of heavier earrings and supports damaged
 and stretched earlobes.Regularly wearing large or heavy earrings can not only cause discomfort and strain, but can also cause earlo
bes to tear or stretch. Dangle Dots provide instant relief from pressure and tearing and are super easy to apply. They are worn invi
sibly at the back of the earlobe in order to bear the weight of your earring. Please note: due to the single use nature of our Dang
le Dots, they are not eligible for change of mind returns due to hygiene reasons.  VENDOR=Dangle Dots PRODUCT_TYPE=Earrings
TAGS=20ALL | afterpayday | birthday | BOGO | boss | eofy | FREEGIFT99 | mainevent | mayhem | noreturn | rofrenzy | SANDS | sas | sta
rtsat60 | tagged:new URL=  IMAGE=  CREATED_AT_Products=2018-10-12 07:04:12 UPDATED_AT=2023-09-30 03:46:52 PUBLISHED_AT=43385.297199
BESTSELLER_RANK=0 REVIEW_COUNT=10 CREATED_AT=2020-11-03T21:47:07 CATEGORY_SLUG=everyday FIRST.SHOPIFY_PRODUCT_ID=0
LAST.SHOPIFY_PRODUCT_ID=0 REVIEW_ID=7ad94eac-caee-46e7-89c6-3738f96d75ad AUTHOR=Catherine S.
BODY=Bought two- will definitely buy more! With sizing, I would measure carefully then err a bit on the smaller side. The bangles ar
e beautifully smooth so it's easy to get them on and off. REPLY=  RATING=5 THUMB_UP_COUNT=0 THUMB_DOWN_COUNT=0 Prices=15.95 BSR=1
Positions=1 COMPARE_AT_PRICES=. price_difference=. Discounted_Status=0 Discount=. Ratings=5 Created_At_Reviews=20201103
REVIEW_COUNTS=10 _ERROR_=1 _N_=20
NOTE: MERGE statement has more than one data set with repeats of BY values.
NOTE: Missing values were generated as a result of performing an operation on missing values.
      Each place is given by: (Number of times) at (Line):(Column).
      589 at 144:38   589 at 149:30
NOTE: Mathematical operations could not be performed at the following places. The results of the operations have been set to
      missing values.
      Each place is given by: (Number of times) at (Line):(Column).
      204 at 138:8    589 at 143:22
```

```
NOTE: There were 799 observations read from the data set JEWELS.RUBY_PRODUCTANDVARIANTS.
NOTE: There were 55 observations read from the data set JEWELS.RUBY_PRODUCTANDVARIANTS.
NOTE: There were 793 observations read from the data set JEWELS.RUBY_PRODUCT_CATEGORIES.
NOTE: There were 194 observations read from the data set JEWELS.RUBY_PRODUCTANDVARIANTS.
NOTE: There were 787 observations read from the data set JEWELS.RUBY_REVIEWS.
NOTE: The data set WORK.RUBY_ANALYSIS has 799 observations and 23 variables.
NOTE: DATA statement used (Total process time):
      real time             0.01 seconds
      user cpu time         0.01 seconds
      system cpu time       0.01 seconds
      memory                6675.31k
      OS Memory             34752.00k
      Timestamp             11/01/2024 09:16:28 AM
      Step Count                        398  Switch Count  1
      Page Faults                       0
      Page Reclaims                     1080
      Page Swaps                        0
      Voluntary Context Switches        26
      Involuntary Context Switches      1
      Block Input Operations            0
      Block Output Operations           1888


186
187
188         /*Step 3:- Analysis Starts here*/
189
190
191         /* Type of data available for analysis */
192
193         ODS PDF file="/home/u63975320/Somesh_Training/Assignment 2/ SAS Assignment-2 Report.pdf" style=HTMLBlue contents=yes
193       ! startpage=no;
NOTE: Writing ODS PDF output to DISK destination "/home/u63975320/Somesh_Training/Assignment 2/ SAS Assignment-2 Report.pdf",
      printer "PDF".
194         optionsnodate topmargin = 1 bottommargin = 1 leftmargin = 1 rightmargin = 1 center pageno=1;
WARNING: A units value was not specified for the TOPMARGIN option. Inches will be used.
WARNING: A units value was not specified for the BOTTOMMARGIN option. Inches will be used.
WARNING: A units value was not specified for the LEFTMARGIN option. Inches will be used.
WARNING: A units value was not specified for the RIGHTMARGIN option. Inches will be used.
195         ods noproctitle;
196         ods escapechar="^";
197
198         /*Idea for Table of content adjustment:-
198       ! https://communities.sas.com/t5/SAS-Programming/ODS-PDF-report-Adjusting-position-of-Table-of-Contents/td-p/791595*/
199         /*Idea for selective printing into Report:-
199       ! https://communities.sas.com/t5/SAS-Studio/How-to-Show-First-Table-only-in-Proc-Contents/td-p/374281*/
200         /*Idea for exclusion from the report to avoid double
200       ! coding:-https://documentation.sas.com/doc/en/pgmsascdc/9.4_3.5/odsug/p1b72ff70v3obrn16aanp1r9q2bu.htm*/
201         /*Idea for page break control in ODS PDF Report:-
201       ! https://communities.sas.com/t5/SAS-Programming/How-do-I-add-page-breaks-in-ODS-PDF-output-when-using-quot/td-p/721056*/
202
203         ods pdf startpage=now;
204         ods pdf text="^S={just=center font_weight=bold font_size=16pt} Assignment 2";
205         ods pdf text="^S={just=center font_weight=bold font_size=20pt} Insights from Ruby Olive Jewellery Store Analysis";
206         ods pdf text="^S={just=center font_weight=bold font_size=14pt} 26777 Data Processing Using SAS - Spring 2024";
207         ods pdf text="^S={just=center font_weight=bold font_size=14pt} Somesh Shanbhag - 25525837";
208
209         run;
210
211
212         ods pdf startpage=now;
213         proc contents data=ruby_analysis order=varnum;
214         Title "Variables and their Descriptions";
215         ods select "varnum";
216         run;

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time             0.03 seconds
      user cpu time         0.04 seconds
      system cpu time       0.00 seconds
      memory                2592.25k
      OS Memory             33600.00k
      Timestamp             11/01/2024 09:16:28 AM
      Step Count                        399  Switch Count  2
      Page Faults                       0
      Page Reclaims                     330
      Page Swaps                        0
      Voluntary Context Switches        20
      Involuntary Context Switches      3
      Block Input Operations            0
      Block Output Operations           24


217
218         ods exclude all;
219
```

```
220        /* Sales Volume */
221
222        Title "Total Sales volume per product type" ;
223        proc summary data=ruby_analysis printalltypes order=freq descending sum maxdec=2;
224        var prices;
225        class Product_type;
226        output out=sales_volume (drop= _type_)  sum=Total_value;
227        run;
```

```
NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.
NOTE: The data set WORK.SALES_VOLUME has 24 observations and 3 variables.
NOTE: PROCEDURE SUMMARY used (Total process time):
      real time            0.00 seconds
      user cpu time        0.00 seconds
      system cpu time      0.01 seconds
      memory               8771.25k
      OS Memory            40788.00k
      Timestamp            11/01/2024 09:16:28 AM
      Step Count                        400  Switch Count  2
      Page Faults                       0
      Page Reclaims                     2028
      Page Swaps                        0
      Voluntary Context Switches        27
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           264
```

```
228
229        ods select all;
230
231        ods pdf startpage=now;
232
233        Title "Total Sales volume per product type";
234        proc print data= sales_volume label noobs;
235        Label
236        PRODUCT_TYPE = "Product Type"
237        _FREQ_ = "Number of products per category"
238        Total_value = "Sales volume";
239        Footnote justify=center "Explains the value of inventory and possible sales per category.";
240        run;
```

```
NOTE: There were 24 observations read from the data set WORK.SALES_VOLUME.
NOTE: PROCEDURE PRINT used (Total process time):
      real time            0.02 seconds
      user cpu time        0.02 seconds
      system cpu time      0.00 seconds
      memory               940.28k
      OS Memory            34236.00k
      Timestamp            11/01/2024 09:16:28 AM
      Step Count                        401  Switch Count  1
      Page Faults                       0
      Page Reclaims                     73
      Page Swaps                        0
      Voluntary Context Switches        7
      Involuntary Context Switches      1
      Block Input Operations            0
      Block Output Operations           16
```

```
241
242        ods pdf startpage=now;
243
244        /* Sales Volume Graph*/
245        ods graphics / reset width=6.4in height=4.8in imagemap;
246        title  "Which product type on inventory can generate the highest sales volume?";
247        proc sgplot data=WORK.SALES_VOLUME noautolegend;
248        vbar PRODUCT_TYPE / response=Total_value group=Total_value
249        groupdisplay=cluster datalabel;
250        yaxis grid;
251        footnote "Earrings category has the ability to generate the highest sales";
252        run;
```

```
NOTE: PROCEDURE SGPLOT used (Total process time):
      real time            0.14 seconds
      user cpu time        0.05 seconds
      system cpu time      0.01 seconds
      memory               13103.34k
      OS Memory            43452.00k
      Timestamp            11/01/2024 09:16:28 AM
      Step Count                        402  Switch Count  3
      Page Faults                       0
      Page Reclaims                     2975
      Page Swaps                        0
      Voluntary Context Switches        297
      Involuntary Context Switches      5
```

```
        Block Input Operations           0
        Block Output Operations          952
```

NOTE: There were 24 observations read from the data set WORK.SALES_VOLUME.

```
253
254        ods graphics / reset;
255        /* Idea to Remove the auto legend from appearing:-
255    ! https://communities.sas.com/t5/SAS-Programming/Removing-entire-legend/td-p/703899*/
256
257        ods pdf startpage=now;
258        /* Average Pricing */
259
260        proc univariate data=ruby_analysis plots freq ;
261        Title "Customer Spending Habits";
262        var prices;
263        ODS select "Quantiles" "Plots for Prices";
264        Footnote "From the inventory analysis, it is clear that most customers spend on average between $18 to $34 with $25 being
264    !  the mean amount which is why majority of the products are priced around this range.";
265        run;
```

NOTE: PROCEDURE UNIVARIATE used (Total process time):
```
      real time            0.15 seconds
      user cpu time        0.07 seconds
      system cpu time      0.00 seconds
      memory               4608.68k
      OS Memory            46320.00k
      Timestamp            11/01/2024 09:16:28 AM
      Step Count                   403  Switch Count  3
      Page Faults                  0
      Page Reclaims                801
      Page Swaps                   0
      Voluntary Context Switches   360
      Involuntary Context Switches 7
      Block Input Operations       0
      Block Output Operations      560
```

```
266
267        ods exclude all;
268
269
270
271        /* Product Ratings */
272
273        proc means data=ruby_analysis mean;
274        var ratings Review_Counts;
275        class product_type;
276        run;
```

NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.
NOTE: PROCEDURE MEANS used (Total process time):
```
      real time            0.00 seconds
      user cpu time        0.00 seconds
      system cpu time      0.01 seconds
      memory               8155.39k
      OS Memory            51024.00k
      Timestamp            11/01/2024 09:16:28 AM
      Step Count                   404  Switch Count  1
      Page Faults                  0
      Page Reclaims                1792
      Page Swaps                   0
      Voluntary Context Switches   13
      Involuntary Context Switches 0
      Block Input Operations       0
      Block Output Operations      0
```

```
277
278        ods select all;
279        ods pdf startpage=now;
280
281
282        proc print data=ruby_analysis noobs label;
283        Title "Products which received less than 4 rating";
284        var name ratings body vendor;
285        where ratings <= 3 AND ratings>0;
286        Label NAME = "Product Name"
287          BODY = "Customer Reply"
288          Vendor = "Vendor";
289        footnote "Both reported broken products are made in house but breakage rate is within acceptable margin of error.";
290        run;
```

NOTE: There were 2 observations read from the data set WORK.RUBY_ANALYSIS.
      WHERE (ratings>0 and ratings<=3);
NOTE: PROCEDURE PRINT used (Total process time):

```
        real time           0.01 seconds
        user cpu time       0.02 seconds
        system cpu time     0.00 seconds
        memory              1748.15k
        OS Memory           44864.00k
        Timestamp           11/01/2024 09:16:28 AM
        Step Count                    405  Switch Count  2
        Page Faults                   0
        Page Reclaims                 260
        Page Swaps                    0
        Voluntary Context Switches    23
        Involuntary Context Switches  0
        Block Input Operations        0
        Block Output Operations       16
```

```
291
292         ods exclude all;
293
294         proc freq data=ruby_analysis;
295         table ratings/nocum out=Ratings_for_products;
296         run;
```

```
NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.
NOTE: The data set WORK.RATINGS_FOR_PRODUCTS has 4 observations and 3 variables.
NOTE: PROCEDURE FREQ used (Total process time):
        real time           0.00 seconds
        user cpu time       0.00 seconds
        system cpu time     0.00 seconds
        memory              1877.12k
        OS Memory           45124.00k
        Timestamp           11/01/2024 09:16:28 AM
        Step Count                    406  Switch Count  2
        Page Faults                   0
        Page Reclaims                 344
        Page Swaps                    0
        Voluntary Context Switches    22
        Involuntary Context Switches  1
        Block Input Operations        0
        Block Output Operations       528
```

```
297
298         ods pdf startpage=now;
299         ods select all;
300
301         proc print data=Ratings_for_products noobs label;
302         title "Total Ratings recieved for all products.";
303         where Ratings not is missing;
304         label
305           Count = "Number of Products"
306           Percent = "% of Total Products";
307         format
308           Count 10.0
309           Percent 10.2;
310         footnote1 "Rating system - 5 is best and 1 is the worst";
311         footnote2 "94% of products have a rating of 5";
312         run;
```

```
NOTE: There were 3 observations read from the data set WORK.RATINGS_FOR_PRODUCTS.
      WHERE Ratings is not null;
NOTE: PROCEDURE PRINT used (Total process time):
        real time           0.00 seconds
        user cpu time       0.01 seconds
        system cpu time     0.01 seconds
        memory              986.87k
        OS Memory           44224.00k
        Timestamp           11/01/2024 09:16:28 AM
        Step Count                    407  Switch Count  3
        Page Faults                   0
        Page Reclaims                 98
        Page Swaps                    0
        Voluntary Context Switches    21
        Involuntary Context Switches  1
        Block Input Operations        0
        Block Output Operations       8
```

```
313
314         ods exclude all;
315
316         ods pdf startpage=now;
317
318         /* Bestseller ranking by product type*/
319
320         proc freq data=ruby_analysis ;
```

```
321          tables BSR*Product_type*prices/ list nocum out=BSR_rank;
322          run;
```

NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.
NOTE: The data set WORK.BSR_RANK has 261 observations and 5 variables.
NOTE: PROCEDURE FREQ used (Total process time):
      real time   0.00 seconds
      user cpu time   0.00 seconds
      system cpu time   0.00 seconds
      memory   2635.15k
      OS Memory   45904.00k
      Timestamp   11/01/2024 09:16:28 AM
      Step Count   408   Switch Count 5
      Page Faults   0
      Page Reclaims   536
      Page Swaps   0
      Voluntary Context Switches   36
      Involuntary Context Switches 0
      Block Input Operations   0
      Block Output Operations   1320

```
323
324          ods select all;
325
326          proc print data=BSR_rank (obs=16) noobs label;
327          Title "Top Selling product categories";
328          where BSR not is missing;
329          label BSR = "Bestseller Rank"
330            PRODUCT_TYPE = "Product Type"
331            Prices = "Price"
332            COUNT= " Number of Products"
333            PERCENT = "% of Total Products";
334          format
335            Count 10.0
336            Percent 10.2;
337          Footnote "From the table above, it is clear that Ruby Olive earrings are very popular among their customers.";
338          run;
```

NOTE: There were 16 observations read from the data set WORK.BSR_RANK.
      WHERE BSR is not null;
NOTE: PROCEDURE PRINT used (Total process time):
      real time   0.02 seconds
      user cpu time   0.02 seconds
      system cpu time   0.00 seconds
      memory   1159.84k
      OS Memory   44224.00k
      Timestamp   11/01/2024 09:16:28 AM
      Step Count   409   Switch Count 2
      Page Faults   0
      Page Reclaims   100
      Page Swaps   0
      Voluntary Context Switches   14
      Involuntary Context Switches 1
      Block Input Operations   0
      Block Output Operations   8

```
339          ods pdf startpage=now;
340          /* Number of products on discount*/
341          proc format;
342          value discount_check
343          1 = "Discounted"
344          0 = "Full Price";
```
NOTE: Format DISCOUNT_CHECK is already on the library WORK.FORMATS.
NOTE: Format DISCOUNT_CHECK has been output.
```
345          run;
```

NOTE: PROCEDURE FORMAT used (Total process time):
      real time   0.00 seconds
      user cpu time   0.00 seconds
      system cpu time   0.00 seconds
      memory   244.78k
      OS Memory   43704.00k
      Timestamp   11/01/2024 09:16:28 AM
      Step Count   410   Switch Count 0
      Page Faults   0
      Page Reclaims   14
      Page Swaps   0
      Voluntary Context Switches   0
      Involuntary Context Switches 0
      Block Input Operations   0
      Block Output Operations   32

```
346
```

```
347        proc freq data=ruby_analysis;
348        Title "Number of products on Discount";
349        tables Discounted_status/ nocum;
350        format Discounted_status discount_check.;
351        Footnote "Ruby Olive have 210 products on sale currently.";
352        run;
```

```
NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.
NOTE: PROCEDURE FREQ used (Total process time):
      real time              0.01 seconds
      user cpu time          0.01 seconds
      system cpu time        0.00 seconds
      memory                 1803.62k
      OS Memory              44864.00k
      Timestamp              11/01/2024 09:16:28 AM
      Step Count                       411  Switch Count  3
      Page Faults                      0
      Page Reclaims                    279
      Page Swaps                       0
      Voluntary Context Switches       26
      Involuntary Context Switches     1
      Block Input Operations           0
      Block Output Operations          280
```

```
353
354        ods exclude all;
355        ods pdf startpage=now;
356
357        /*Discount by Product_type*/
358        proc summary data=ruby_analysis print mean maxdec=2 ;
359        var prices price_difference discount COMPARE_AT_PRICES;
360        class product_type;
361        where COMPARE_AT_PRICES not is missing;
362        output out=product_discounts;
363        run;
```

```
NOTE: There were 210 observations read from the data set WORK.RUBY_ANALYSIS.
      WHERE COMPARE_AT_PRICES is not null;
NOTE: The data set WORK.PRODUCT_DISCOUNTS has 60 observations and 8 variables.
NOTE: PROCEDURE SUMMARY used (Total process time):
      real time              0.00 seconds
      user cpu time          0.00 seconds
      system cpu time        0.01 seconds
      memory                 8106.67k
      OS Memory              50516.00k
      Timestamp              11/01/2024 09:16:28 AM
      Step Count                       412  Switch Count  4
      Page Faults                      0
      Page Reclaims                    1726
      Page Swaps                       0
      Voluntary Context Switches       29
      Involuntary Context Switches     1
      Block Input Operations           0
      Block Output Operations          264
```

```
364
365        ods select all;
366        ods pdf startpage=now;
367
368        %let type = Bracelets and Bangles;
369        /*
370        Please choose from the following Options:-
371        Bag Hook
372        Bracelets and Bangles
373        Brooches & Pins
374        Earrings
375        Gift Packs
376        Lanyards
377        Lens Cloth
378        Necklaces
379        Pet Products
380        Puzzles
381        Sale
382        */
383
384        proc print data=product_discounts noobs label;
385        Title "Discount details for chosen product categories";
386        var PRODUCT_TYPE _FREQ COMPARE_AT_PRICES Prices  price_difference Discount  ;
387        where PRODUCT_TYPE not is missing AND _STAT_= "MEAN" AND PRODUCT_TYPE = "&type";
388        Label
389        _FREQ_ = "Number of Products"
390        Prices = "Final Mean Price"
391        COMPARE_AT_PRICES = "Old Mean Price"
392        price_difference = "Price Difference"
```

```
393         Discount = "Discount %";
394         format
395         Prices 10.2
396         price_difference 10.2
397         Discount 10.2
398         COMPARE_AT_PRICES 10.2;
399         Footnote "Designed to print discount details of any chosen product type using a macro.";
400         run;
```

NOTE: There were 1 observations read from the data set WORK.PRODUCT_DISCOUNTS.
      WHERE (PRODUCT_TYPE is not null) and (_STAT_='MEAN') and (PRODUCT_TYPE='Bracelets and Bangles');
NOTE: PROCEDURE PRINT used (Total process time):
      real time   0.00 seconds
      user cpu time   0.00 seconds
      system cpu time   0.00 seconds
      memory   1073.03k
      OS Memory   44224.00k
      Timestamp   11/01/2024 09:16:28 AM
      Step Count   413 Switch Count 2
      Page Faults   0
      Page Reclaims   96
      Page Swaps   0
      Voluntary Context Switches   16
      Involuntary Context Switches   0
      Block Input Operations   0
      Block Output Operations   8

```
401
402         ods pdf startpage=now;
403         /*Correlation between price and Bestseller ranking*/
404         ods graphics / reset width=6.4in height=4.8in imagemap;
405         Title "Checking the Correlation between price and Bestseller ranking";
406         proc sgplot data=WORK.RUBY_ANALYSIS;
407         reg x=Prices y=BSR / nomarkers cli alpha=0.05;
408         scatter x=Prices y=BSR /;
409         xaxis grid;
410         yaxis grid;
411         Footnote " ";
412         run;
```

NOTE: PROCEDURE SGPLOT used (Total process time):
      real time   0.20 seconds
      user cpu time   0.09 seconds
      system cpu time   0.01 seconds
      memory   3323.50k
      OS Memory   45436.00k
      Timestamp   11/01/2024 09:16:28 AM
      Step Count   414 Switch Count 2
      Page Faults   0
      Page Reclaims   436
      Page Swaps   0
      Voluntary Context Switches   263
      Involuntary Context Switches   2
      Block Input Operations   0
      Block Output Operations   1088

NOTE: HTML data tips have been disabled for at least one plot because the threshold has been reached. You can set TIPMAX=800 in the
      ODS GRAPHICS statement to produce data tips for all plots.
NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.

```
413
414         ods graphics / reset;
415
416
417         ods graphics / reset width=6.4in height=4.8in imagemap;
418
419         ods pdf startpage=now;
420         /*Linear Regression to analyze best seller rankings*/
421
422         Title "Linear Regression to understand Bestseller Rankings";
423         proc glmselect data=WORK.RUBY_ANALYSIS outdesign(addinputvars)=Work.reg_design;
424         class PRODUCT_TYPE AVAILABLE VENDOR TAXABLE / param=glm;
425         model BSR=Prices Ratings REVIEW_COUNTS COMPARE_AT_PRICES Discounted_Status
426         PRODUCT_TYPE AVAILABLE VENDOR TAXABLE / showpvalues selection=none;
427         ODS select ParameterEstimates FitStatistics;
428         run;
```

NOTE: The CLASS variable TAXABLE has only one level: 'YES'.
NOTE: There were 799 observations read from the data set WORK.RUBY_ANALYSIS.
NOTE: The data set WORK.REG_DESIGN has 799 observations and 39 variables.
NOTE: PROCEDURE GLMSELECT used (Total process time):
      real time   0.04 seconds
      user cpu time   0.05 seconds
      system cpu time   0.00 seconds
      memory   4703.87k

```
OS Memory            46144.00k
Timestamp            11/01/2024 09:16:28 AM
Step Count                   415   Switch Count  3
Page Faults                  0
Page Reclaims                421
Page Swaps                   0
Voluntary Context Switches   31
Involuntary Context Switches 4
Block Input Operations       0
Block Output Operations      2312
```

```
429
430        ODS PDF CLOSE;
NOTE: ODS PDF printed 13 pages to /home/u63975320/Somesh_Training/Assignment 2/ SAS Assignment-2 Report.pdf.
431
432        OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
442
```

Results: Assignment 2_SAS.sas

Data Set Name	JEWELS.RUBY_REVIEWS	**Observations**	1258
Member Type	DATA	**Variables**	10
Engine	V9	**Indexes**	0
Created	11/01/2024 20:16:28	**Observation Length**	1263
Last Modified	11/01/2024 20:16:28	**Deleted Observations**	0
Protection		**Compressed**	NO
Data Set Type		**Sorted**	YES
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	13
First Data Page	1
Max Obs per Page	103
Obs in First Data Page	101
Number of Data Set Repairs	0
Filename	/home/u63975320/Somesh_Training/ruby_reviews.sas7bdat
Release Created	9.0401M7
Host Created	Linux
Inode Number	11147119691
Access Permission	rw-r--r--
Owner Name	u63975320
File Size	2MB
File Size (bytes)	1835008

Alphabetic List of Variables and Attributes						
#	**Variable**	**Type**	**Len**	**Format**	**Informat**	**Label**
3	AUTHOR	Char	20	$20.	$20.	AUTHOR
5	BODY	Char	650	$650.	$650.	BODY
10	CREATED_AT	Char	20	$20.	$20.	CREATED_AT
7	RATING	Char	1	$1.	$1.	RATING
6	REPLY	Char	435	$435.	$435.	REPLY
2	REVIEW_ID	Char	36	$36.	$36.	REVIEW_ID
1	SHOPIFY_PRODUCT	Char	18	$18.	$18.	SHOPIFY_PRODUCT
9	THUMB_DOWN_COUNT	Char	1	$1.	$1.	THUMB_DOWN_COUNT
8	THUMB_UP_COUNT	Char	1	$1.	$1.	THUMB_UP_COUNT
4	TITLE	Char	81	$81.	$81.	TITLE

Sort Information	
Sortedby	SHOPIFY_PRODUCT
Validated	YES
Character Set	ASCII

Variables and their Descriptions

Variables in Creation Order						
#	**Variable**	**Type**	**Len**	**Format**	**Informat**	**Label**
1	SKU	Char	67	$67.	$67.	Stock ID
2	SHOPIFY_VARIANT_ID	Char	19	$19.	$19.	Shopify Variant ID
3	SHOPIFY_PRODUCT_ID	Char	18	$18.	$18.	Shopify Product ID
4	TITLE	Char	44	$44.	$44.	Title
5	GRAMS	Char	3	$3.	$3.	Weight in grams
6	TAXABLE	Char	3	$3.	$3.	Taxable
7	REQUIRES_SHIPPING	Char	3	$3.	$3.	Shipping Requirement
8	AVAILABLE	Char	3	$3.	$3.	Stock Availability

			Variables in Creation Order			
#	Variable	Type	Len	Format	Informat	Label
9	NAME	Char	70	$70.	$70.	Name
10	VENDOR	Char	36	$36.	$36.	Vendor
11	PRODUCT_TYPE	Char	23	$23.	$23.	Product Type
12	CREATED_AT_Products	Char	19	$19.	$19.	Creation Date (Products)
13	BODY	Char	650	$650.	$650.	Review Description
14	Prices	Num	8			Final Price
15	BSR	Num	8			Bestseller Rank
16	Positions	Num	8			
17	COMPARE_AT_PRICES	Num	8			Old Price
18	price_difference	Num	8			Price Difference
19	Discounted_Status	Num	8			Discounted Status
20	Discount	Num	8			
21	Ratings	Num	8			
22	Created_At_Reviews	Char	19			Creation Date (Reviews)
23	REVIEW_COUNTS	Num	8			Review Count

Total Sales volume per product type

Product Type	Number of products per category	Sales volume
Earrings	257	5863.85
Pet Products	87	3017.09
Necklaces	80	3749.80
Bangles & Bracelets	70	1460.00
Lanyards	67	1253.85
Gift Packs	52	3222.90
Brooches & Pins	36	573.45
Gift Card	26	2400.00
Bracelets and Bangles	22	514.10
Eyewear Straps & Chains	17	295.15
Lens Cloth	11	106.50
Towel	11	571.85
Bag	10	189.50
Hand Fans	8	199.60
ID Zinger	6	113.70
Eye Masks	4	196.00
Puzzles	3	74.85
Bag Hook	3	43.85
Pouch	3	44.85
Scarf	3	217.00
Sale	2	19.90
free_gift	1	0.00
Tote Bag	1	29.95
	780	24157.74

Explains the value of inventory and possible sales per category.

Which product type on inventory can generate the highest sales volume?

Earrings category has the ability to generate the highest sales
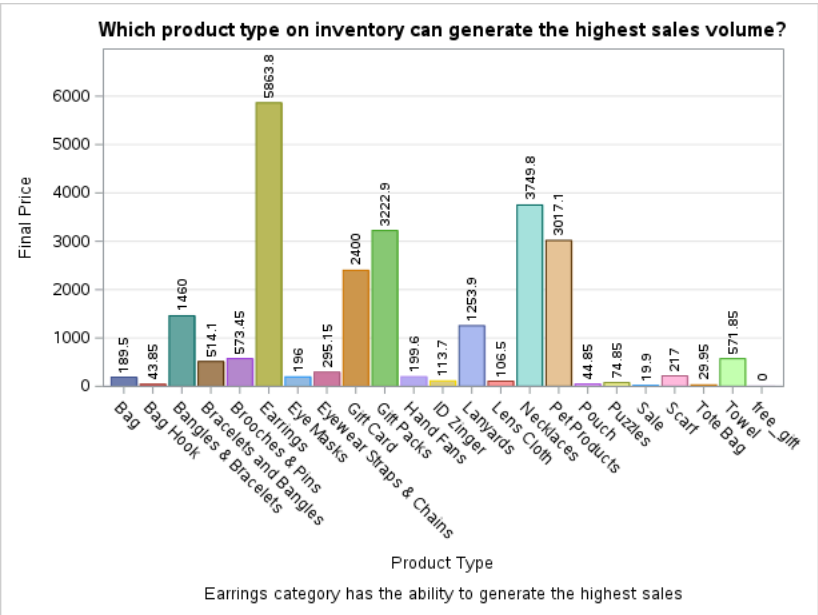
Customer Spending Habits

Variable: Prices (Final Price)

Quantiles (Definition 5)	
Level	**Quantile**
100% Max	200.00
99%	129.00
95%	79.00
90%	63.00
75% Q3	33.95
50% Median	24.95
25% Q1	18.00
10%	9.95
5%	8.95
1%	5.00
0% Min	0.00
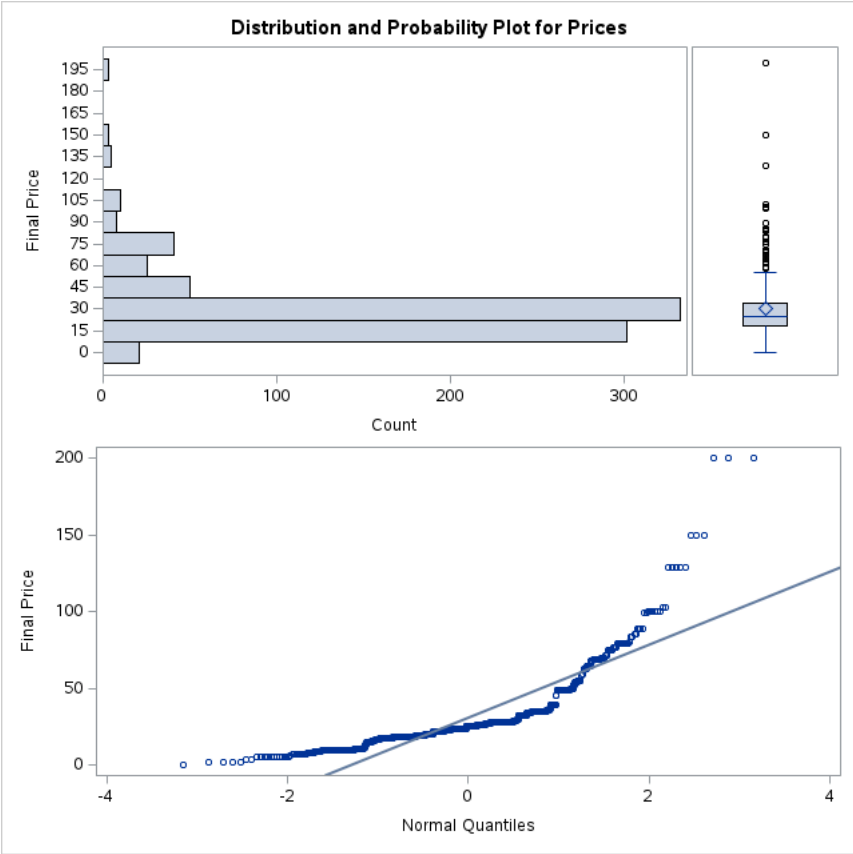
From the inventory analysis, it is clear that most customers spend on average between $18 to $34 with $25 being the mean amount which is why majority of the products are priced around this range.

Products which received less than 4 rating

Product Name	Ratings	Customer Reply	Vendor
Rainbow Reef Necklace	1	It broke after wearing it three times.	Ruby Olive
Colour Me Happy Drop Earring (10 Colours)	1	It broke after wearing it three times.	Ruby Olive

Both reported broken products are made in house but breakage rate is within acceptable margin of error.

Total Ratings recieved for all products.

Ratings	Number of Products	% of Total Products
1	2	0.25
4	39	4.92
5	751	94.82

Rating system - 5 is best and 1 is the worst
94% of products have a rating of 5

Top Selling product categories

Bestseller Rank	Product Type	Price	Number of Products	% of Total Products
1	Earrings	15.95	4	0.67
1	Necklaces	49.00	2	0.34
2	Lanyards	19.95	8	1.34
3	Earrings	28.00	43	7.23

Bestseller Rank	Product Type	Price	Number of Products	% of Total Products
4	Earrings	24.00	26	4.37
5	Bangles & Bracelets	22.00	16	2.69
6	Earrings	26.00	16	2.69
7	Earrings	35.00	2	0.34
8	Earrings	22.40	6	1.01
9	Earrings	8.95	6	1.01
10	Necklaces	36.00	2	0.34
11	Earrings	5.00	1	0.17
12	Earrings	28.00	13	2.18
13	Earrings	35.00	12	2.02
14	Earrings	7.95	3	0.50
15	Lanyards	17.95	4	0.67

From the table above, it is clear that Ruby Olive earrings are very popular among their customers.

Number of products on Discount

Discounted Status		
Discounted_Status	Frequency	Percent
Full Price	589	73.72
Discounted	210	26.28

Ruby Olive have 210 products on sale currently.

Discount details for chosen product categories

Product Type	Number of Products	Old Mean Price	Final Mean Price	Price Difference	Discount %
Bracelets and Bangles	5	16.00	9.95	6.05	37.81

Designed to print discount details of any chosen product type using a macro.

Checking the Correlation between price and Bestseller ranking
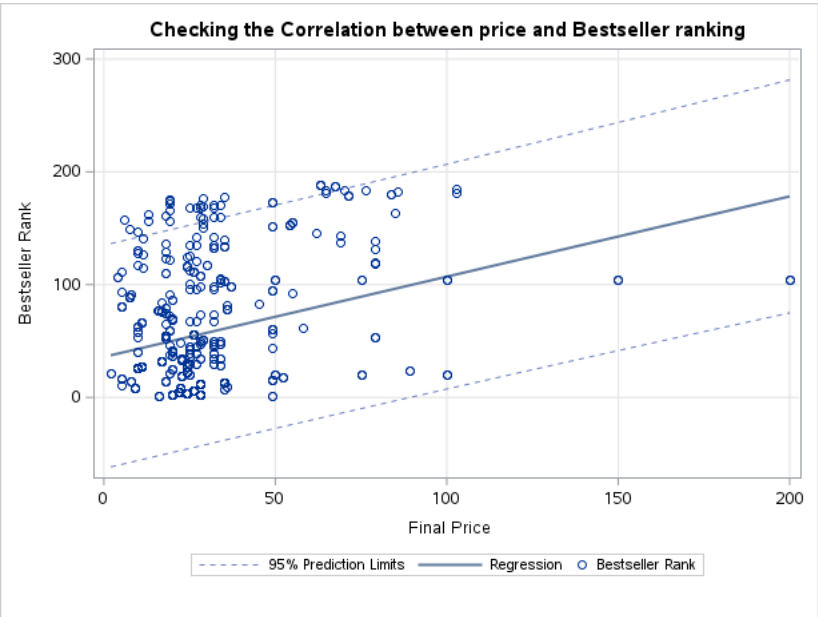
Linear Regression to understand Bestseller Rankings

Least Squares Model (No Selection)

Root MSE	16.63169
Dependent Mean	55.09483
R-Square	0.8765
Adj R-Sq	0.8580
AIC	785.00724
AICC	791.25214
SBC	711.06468

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	86.309989	39.157599	2.20	0.0298
Prices	1	1.556941	0.393893	3.95	0.0001
Ratings	1	7.897472	6.819230	1.16	0.2496
REVIEW_COUNTS	1	-4.514047	0.930673	-4.85	<.0001

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > |t|
COMPARE_AT_PRICES	1	-0.745304	0.480093	-1.55	0.1237
Discounted_Status	0	0	.	.	.
PRODUCT_TYPE Bag Hook	1	26.418474	19.276131	1.37	0.1736
PRODUCT_TYPE Brooches & Pins	1	-20.197925	13.811410	-1.46	0.1468
PRODUCT_TYPE Earrings	1	-60.426962	15.725116	-3.84	0.0002
PRODUCT_TYPE Gift Packs	1	-32.207836	21.035804	-1.53	0.1289
PRODUCT_TYPE Necklaces	1	-79.714320	17.363078	-4.59	<.0001
PRODUCT_TYPE Pet Products	1	-0.578941	16.836149	-0.03	0.9726
PRODUCT_TYPE Puzzles	1	-48.302719	22.274946	-2.17	0.0325
PRODUCT_TYPE Sale	0	0	.	.	.
AVAILABLE NO	1	-15.587216	8.865438	-1.76	0.0818
AVAILABLE YES	0	0	.	.	.
VENDOR Charity By Design	1	12.674971	22.985970	0.55	0.5826
VENDOR Limited Run	1	9.988558	22.726142	0.44	0.6612
VENDOR Ruby Olive	1	23.913779	12.694720	1.88	0.0625
VENDOR Ruby Olive Jewellery	0	0	.	.	.
TAXABLE YES	0	0	.	.	.

			Standard Error	t Value	Pr > |t|