```sas
/* Create the Cleaned_Tourism Table */
/* Part 1 */
/* 1. If necessary, redefine the cr library. Read the cr.tourism table and create the cr.cleaned_tourism table. */
/* 2. Remove the columns _1995 through _2013. */
/* 3. Create the Country_Name and Tourism_Type columns from values in the Country column. Valid values for Tourism_Type

/* Part 2 */
/* 4. In the Series column, convert values to uppercase and convert ".." to missing a character value. */
/* 5. Determine the conversion type (Mn or Thousands) that will be used to calculate values for the new Y2014 column. Hi
/* 6. In the _2014 column, change the data not available (values of "..") to a single period. */

/* Part 3 */
/* 7. Create the Y2014 column by explicitly converting character values in _2014 to numeric and multiplying by the conve
/* 8. Permanently format Y2014 with the COMMA format. */
/* 9. nclude only Country_Name, Tourism_Type, Category, Series, and Y2014 in the output table. */


data cr.cleaned_tourism;
    length Country_Name $300 Tourism_Type $20;
    retain Country_Name "" Tourism_Type "";
    set cr.Tourism(drop=_1995-_2013);
    if A ne . then Country_Name=Country;
    if lowcase(Country)="inbound tourism" then Tourism_Type ="Inbound tourism";
        else if lowcase(Country)="outbound tourism" then Tourism_Type="Outbound tourism";
    if Country_Name ne Country and Country ne Tourism_Type;
    series=upcase(series);
    if series=".." then Series="";
    ConversionType=scan(country,-1," ");
    if _2014=".." then _2014=".";
    if ConversionType ="Mn" then do;
        if _2014 ne "." then Y2014 = input(_2014,16.)*1000000;
            else Y2014=.;
        Category=cat(scan(country,1,'-','r'),' -US$');
    end;
    else if ConversionType ="Thousands" then do;
        if _2014 ne "." then Y2014 = input(_2014,16.)*1000;
            else Y2014=.;
        Category=scan(country,1,'-','r');
    end;
    format y2014 comma25.;
    drop A ConversionType Country _2014;
run;

proc freq data=cr.cleaned_tourism;
    tables Category Tourism_Type Series;
run;

proc means data=cr.cleaned_tourism min max n maxdec=0;
    var Y2014;
run;

/* Create the Final_Tourism Table */
/* 1. Create a format for the Continent column that labels continent IDs with the corresponding continent names: */
proc format;
    value contIDs
        1 = "North America"
        2 = "South America"
        3 = "Europe"
        4 = "Africa"
        5 = "Asia"
        6 = "Oceania"
        7 = "Antarctica";
run;
/* 2. Merge the cleaned_tourism table with a sorted version of country_info to create the final_tourism table. Include c

proc sort data=cr.country_info(rename=(Country=Country_Name))
            out=country_sorted;
        by country_name;
run;

/* Create the NoCountryFound Table */

data cr.final_tourism
    NoCountryFound(keep=Country_Name);
    merge cr.cleaned_tourism(in=t) Country_Sorted(in=c);
    by country_name;
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```
    if t=1 and c=1 then output cr.Final_Tourism;
    if (t=1 and c=0) and first.country_name=1 then output NoCountryFound;
    format continent contIDs.;
run;

proc freq data=cr.final_tourism nlevels;
    tables category series Tourism_Type Continent /nocum nopercent;
run;

/* QUIZ */
proc means data=cr.final_tourism mean min max maxdec=0;
    var y2014;
    class Continent;
    where Category="Arrivals";
run;

proc means data=cr.final_tourism mean maxdec=0;
    var y2014;
    where lowcase(Category) contains "tourism expenditure in other countries";
run;
```