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Figure size 640x480 with 1 Axes

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\u0001b[0;36mpandas._libs.hashtable.PyObjectHashTable.get_item\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7089\\u0001b[0m, in
Traceback (most recent call last)",
 "File \u0001b[1;32mindex.pyx:167\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mindex.pyx:196\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7081\\u0001b[0m, in
\u0001b[0;36mpandas._libs.hashtable.PyObjectHashTable.get_item\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7089\\u0001b[0m, in
Traceback (most recent call last)",
 "File \u0001b[1;32mindex.pyx:167\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mindex.pyx:196\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7081\\u0001b[0m, in
\u0001b[0;36mpandas._libs.hashtable.PyObjectHashTable.get_item\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7089\\u0001b[0m, in
Traceback (most recent call last)",
 "File \u0001b[1;32mindex.pyx:167\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mindex.pyx:196\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7081\\u0001b[0m, in
\u0001b[0;36mpandas._libs.hashtable.PyObjectHashTable.get_item\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7089\\u0001b[0m, in
Traceback (most recent call last)",
 "File \u0001b[1;32mindex.pyx:167\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mindex.pyx:196\\u0001b[0m, in
\u0001b[0;36mpandas._libs.index.IndexEngine.get_loc\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7081\\u0001b[0m, in
\u0001b[0;36mpandas._libs.hashtable.PyObjectHashTable.get_item\\u0001b[1;34m()\\u0001b[0m\\n",
 "File \u0001b[1;32mpandas_libs\\\\\\hashtable_class_helper.pxi:7089\\u0001b[0m, in
Traceback

```
\u001b[0;36mpandas._libs.hashtable.PyObjectHashTable.get_item\u001b[1;34m()\u001b[0m\n",
    "\u001b[1;31mKeyError\u001b[0m: 'TotalIncome',
    "\nThe above exception was the direct cause of the following exception:\n",
    "\u001b[1;31mKeyError\u001b[0m
last)",
    "Cell \u001b[1;32mIn[60], line 2\u001b[0m\n\u001b[0;32m      1\u001b[0m
\u001b[38;5;66;03m#Log Transformation\u001b[39;00m\n\u001b[1;32m--> 2\u001b[0m
df[\u001b[38;5;124m'\u001b[39m\u001b[38;5;124mTotalIncome log\u001b[39m\u001b[38;5;124m'\u001b[39m]
\u001b[38;5;241m=\u001b[39mnp\u001b[38;5;241m.
\u001b[39mlog(df[\u001b[38;5;124m'\u001b[39m\u001b[38;5;124mTotalIncome \u001b[39m\u001b[38;5;124m'
\u001b[39m])\n\u001b[0;32m      3\u001b[0m sns\u001b[38;5;241m.
\u001b[39mdistplot(df[\u001b[38;5;124m'\u001b[39m\u001b[38;5;124mTotalIncome log\u001b[39m\u001b[38
;5;124m'\u001b[39m])\n",
    "File \u001b[1;32m~\u001b[36m\anaconda3\\Lib\\site-packages\\pandas\\core\\frame.py:4102\u001b[0m, in
\u001b[0;36mDataFrame.__getitem__\u001b[1;34m(self, key)\u001b[0m\n\u001b[0;32m      4100\u001b[0m
\u001b[38;5;28;01mif\u001b[39;00m \u001b[38;5;28msel\u001b[39m\u001b[38;5;241m.
\u001b[39mcolumns\u001b[38;5;241m.\u001b[39mnlevels \u001b[38;5;241m>\u001b[39m
\u001b[38;5;241m1\u001b[39m:\n\u001b[0;32m      4101\u001b[0m
\u001b[38;5;28;01mreturn\u001b[39;00m \u001b[38;5;28msel\u001b[39m\u001b[38;5;241m.
\u001b[39m_getitem_multilevel(key)\n\u001b[1;32m-> 4102\u001b[0m indexer
\u001b[38;5;241m=\u001b[39m \u001b[38;5;28msel\u001b[39m\u001b[38;5;241m.
\u001b[39mcolumns\u001b[38;5;241m.\u001b[39mget_loc(key)\n\u001b[0;32m      4103\u001b[0m
\u001b[38;5;28;01mif\u001b[39;00m is_integer(indexer):\n\u001b[0;32m      4104\u001b[0m      indexer
\u001b[38;5;241m=\u001b[39m [indexer]\n",
    "File \u001b[1;32m~\u001b[36m\anaconda3\\Lib\\site-packages\\pandas\\core\\indexes\
\base.py:3812\u001b[0m, in \u001b[0;36mIndex.get_loc\u001b[1;34m(self, key)\u001b[0m\n\u001b[0;32m
3807\u001b[0m      \u001b[38;5;28;01mif\u001b[39;00m
\u001b[38;5;28misinstance\u001b[39m(casted_key, \u001b[38;5;28mslice\u001b[39m)
\u001b[38;5;129;01mor\u001b[39;00m (\n\u001b[0;32m      3808\u001b[0m
\u001b[38;5;28misinstance\u001b[39m(casted_key, abc\u001b[38;5;241m.
\u001b[39mIterable)\n\u001b[0;32m      3809\u001b[0m          \u001b[38;5;129;01mand\u001b[39;00m
\u001b[38;5;28many\u001b[39m(\u001b[38;5;28misinstance\u001b[39m(x,
\u001b[38;5;28mslice\u001b[39m) \u001b[38;5;28;01mfor\u001b[39;00m x
\u001b[38;5;129;01min\u001b[39;00m casted_key)\n\u001b[0;32m      3810\u001b[0m      ): \n\u001b[0;32m
3811\u001b[0m          \u001b[38;5;28;01mraise\u001b[39;00m InvalidIndexError(key)\n\u001b[1;32m->
3812\u001b[0m          \u001b[38;5;28;01mraise\u001b[39;00m
\u001b[38;5;167;01mKeyError\u001b[39;00m(key) \u001b[38;5;28;01mfrom\u001b[39;00m
\u001b[38;5;21;01merr\u001b[39;00m\n\u001b[0;32m      3813\u001b[0m
\u001b[38;5;28;01mexcept\u001b[39;00m \u001b[38;5;167;01mTypeError\u001b[39;00m:\n\u001b[0;32m
3814\u001b[0m          \u001b[38;5;66;03m# If we have a listlike key, _check_indexing_error will
raise\u001b[39;00m\n\u001b[0;32m      3815\u001b[0m          \u001b[38;5;66;03m# InvalidIndexError.
Otherwise we fall through and re-raise\u001b[39;00m\n\u001b[0;32m      3816\u001b[0m
\u001b[38;5;66;03m# the TypeError.\u001b[39;00m\n\u001b[0;32m      3817\u001b[0m
\u001b[38;5;28msel\u001b[39m\u001b[38;5;241m.\u001b[39m_check_indexing_error(key)\n",
    "\u001b[1;31mKeyError\u001b[0m: 'TotalIncome'
]
}
],
"source": [
    "#Log Transformation\n",
    "df['TotalIncome log']=np.log(df['TotalIncome'])\n",
    "sns.distplot(df['TotalIncome log'])"
]
},
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        "Coorelation Matrix"
    ]
}
```

```
]
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    "evalue": "could not convert string to float: 'LP001002''",
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    "traceback": [
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      "\u001b[1;31mValueError\u001b[0m                                         Traceback (most recent call
last)",
      "Cell \u001b[1;32mIn[63], line 1\u001b[0m\n\u001b[1;32m--> 1\u001b[0m
corr\u001b[38;5;241m=\u001b[39mdf\u001b[38;5;241m.\u001b[39mcorr()\n\u001b[0;32m      2\u001b[0m
sns\u001b[38;5;241m.
\u001b[39mheatmap(corr, annot\u001b[38;5;241m=\u001b[39m\u001b[38;5;28;01mTrue\u001b[39;00m, cmap\u001b[38;5;241m=\u001b[39mBufu)\n",
      "File \u001b[1;32m~\u001b[39m\anaconda3\\Lib\\site-packages\\pandas\\core\\frame.py:11049\u001b[0m,
in \u001b[0;36mDataFrame.corr\u001b[1;34m(self, method, min_periods,
numeric_only)\u001b[0m\n\u001b[0;32m 11047\u001b[0m cols \u001b[38;5;241m=\u001b[39m
data\u001b[38;5;241m.\u001b[39mcolumns\n\u001b[0;32m 11048\u001b[0m idx
\u001b[38;5;241m=\u001b[39m cols\u001b[38;5;241m.\u001b[39mcopy()\n\u001b[1;32m> 11049\u001b[0m
mat \u001b[38;5;241m=\u001b[39m data\u001b[38;5;241m.
\u001b[39mto_numpy(dtype\u001b[38;5;241m=\u001b[39m\u001b[38;5;28mfloat\u001b[39m,
na_value\u001b[38;5;241m=\u001b[39mnp\u001b[38;5;241m.\u001b[39mnan,
copy\u001b[38;5;241m=\u001b[39m\u001b[38;5;28;01mFalse\u001b[39;00m)\n\u001b[0;32m 11051\u001b[0m
\u001b[38;5;28;01mif\u001b[39;00m method \u001b[38;5;241m==\u001b[39m
\u001b[38;5;124m\" \u001b[39m\u001b[38;5;124mpearson\u001b[39m\u001b[38;5;124m\" \u001b[39m:
\n\u001b[0;32m 11052\u001b[0m      correl \u001b[38;5;241m=\u001b[39m libalgos\u001b[38;5;241m.
\u001b[39mnancorr(mat, minp\u001b[38;5;241m=\u001b[39mmmin_periods)\n",
      "File \u001b[1;32m~\u001b[39m\anaconda3\\Lib\\site-packages\\pandas\\core\\frame.py:1993\u001b[0m,
in \u001b[0;36mDataFrame.to_numpy\u001b[1;34m(self, dtype, copy, na_value)\u001b[0m\n\u001b[0;32m
1991\u001b[0m \u001b[38;5;28;01mif\u001b[39;00m dtype \u001b[38;5;129;01mis\u001b[39;00m
\u001b[38;5;129;01mnot\u001b[39;00m \u001b[38;5;28;01mNone\u001b[39;00m:\n\u001b[0;32m
1992\u001b[0m      dtype \u001b[38;5;241m=\u001b[39m np\u001b[38;5;241m.
\u001b[39mdtype(dtype)\n\u001b[1;32m-> 1993\u001b[0m result \u001b[38;5;241m=\u001b[39m
\u001b[38;5;28mself\u001b[39m\u001b[38;5;241m.\u001b[39m_mgr\u001b[38;5;241m.
\u001b[39mas_array(dtype\u001b[38;5;241m=\u001b[39mdtype, copy\u001b[38;5;241m=\u001b[39mcopy,
na_value\u001b[38;5;241m=\u001b[39mna_value)\n\u001b[0;32m 1994\u001b[0m
\u001b[38;5;28;01mif\u001b[39;00m result\u001b[38;5;241m.\u001b[39mdtype
\u001b[38;5;129;01mis\u001b[39;00m \u001b[38;5;129;01mnot\u001b[39;00m dtype:\n\u001b[0;32m
1995\u001b[0m      result \u001b[38;5;241m=\u001b[39m np\u001b[38;5;241m.\u001b[39masarray(result,
dtype\u001b[38;5;241m=\u001b[39mdtype)\n",
      "File \u001b[1;32m~\u001b[39m\anaconda3\\Lib\\site-packages\\pandas\\core\\internals\\
managers.py:1694\u001b[0m, in \u001b[0;36mBlockManager.as_array\u001b[1;34m(self, dtype, copy,
na_value)\u001b[0m\n\u001b[0;32m 1692\u001b[0m          arr\u001b[38;5;241m.
\u001b[39mflags\u001b[38;5;241m.\u001b[39mwriteable \u001b[38;5;241m=\u001b[39m
\u001b[38;5;28;01mFalse\u001b[39;00m\n\u001b[0;32m 1693\u001b[0m
\u001b[38;5;28;01melse\u001b[39;00m:\n\u001b[1;32m-> 1694\u001b[0m      arr
\u001b[38;5;241m=\u001b[39m \u001b[38;5;28mself\u001b[39m\u001b[38;5;241m.
\u001b[39m_interleave(dtype\u001b[38;5;241m=\u001b[39mdtype,
na_value\u001b[38;5;241m=\u001b[39mna_value)\n\u001b[0;32m 1695\u001b[0m      \u001b[38;5;66;03m#
The underlying data was copied within _interleave, so no need\u001b[39;00m\n\u001b[0;32m
1696\u001b[0m      \u001b[38;5;66;03m# to further copy if copy=True or setting
na_value\u001b[39;00m\n\u001b[0;32m 1698\u001b[0m \u001b[38;5;28;01mif\u001b[39;00m na_value
\u001b[38;5;129;01mis\u001b[39;00m lib\u001b[38;5;241m.\u001b[39mno_default:\n",
      "File \u001b[1;32m~\u001b[39m\anaconda3\\Lib\\site-packages\\pandas\\core\\internals\\
```

```
\managers.py:1753\u001b[0m, in \u001b[0;36mBlockManager._interleave\u001b[1;34m(self, dtype,
na_value)\u001b[0m\n\u001b[0;32m    1751\u001b[0m      \u001b[38;5;28;01melse\u001b[39;00m:
\u001b[0;32m    1752\u001b[0m          arr \u001b[38;5;241m=\u001b[39m blk\u001b[38;5;241m.
\u001b[39mget_values(dtype)\n\u001b[1;32m-> 1753\u001b[0m      result[r1\u001b[38;5;241m.
\u001b[39mindexer] \u001b[38;5;241m=\u001b[39m arr\n\u001b[0;32m    1754\u001b[0m
itemmask[r1\u001b[38;5;241m.\u001b[39mindexer] \u001b[38;5;241m=\u001b[39m
\u001b[38;5;241m1\u001b[39m\n\u001b[0;32m    1756\u001b[0m \u001b[38;5;28;01mif\u001b[39;00m
\u001b[38;5;129;01mnot\u001b[39;00m itemmask\u001b[38;5;241m.\u001b[39mall():\n",
"\u001b[1;31mValueError\u001b[0m: could not convert string to float: 'LP001002'"
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"sns.heatmap(corr,annot=True,cmap=Bufu)"
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