



Midterm Skills Exam: Data Wrangling and Analysis

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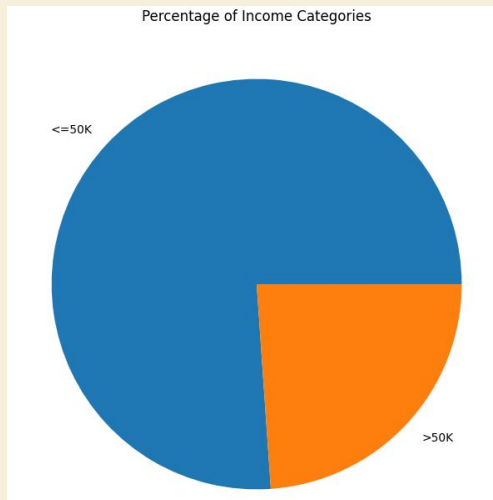


Census Income

Demographic

There are 48842 respondents, ages 17 - 99 years old from 42 different countries, with 4 declared races and genders amounting to 32650 for males and 16192 females

Census income percentage



More people are earning 50k and above than people earning less than 50k

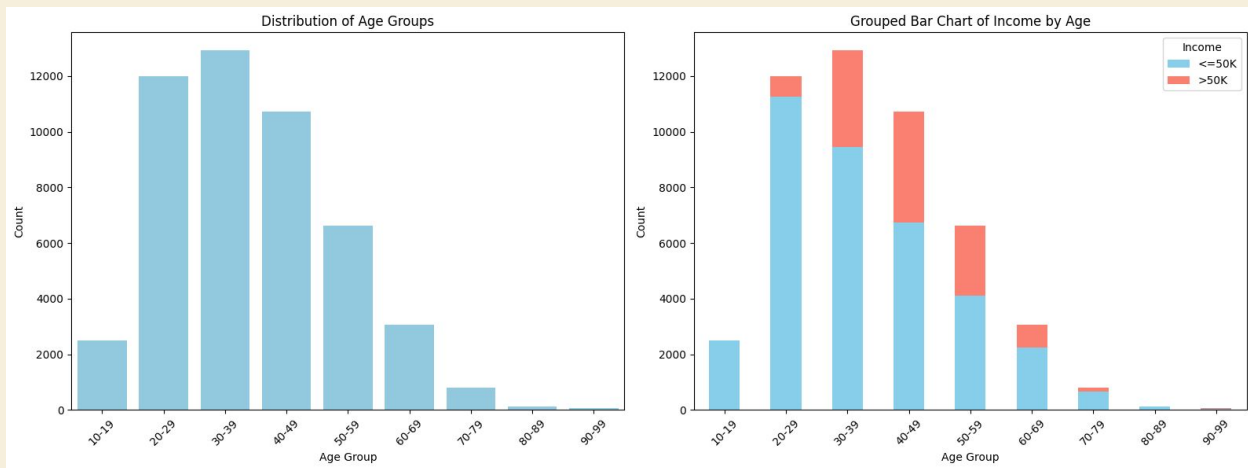
50k and above	37128	76.1%
Less than 50k	11685	23.9%



WHAT FACTORS AFFECT THE RESULT?

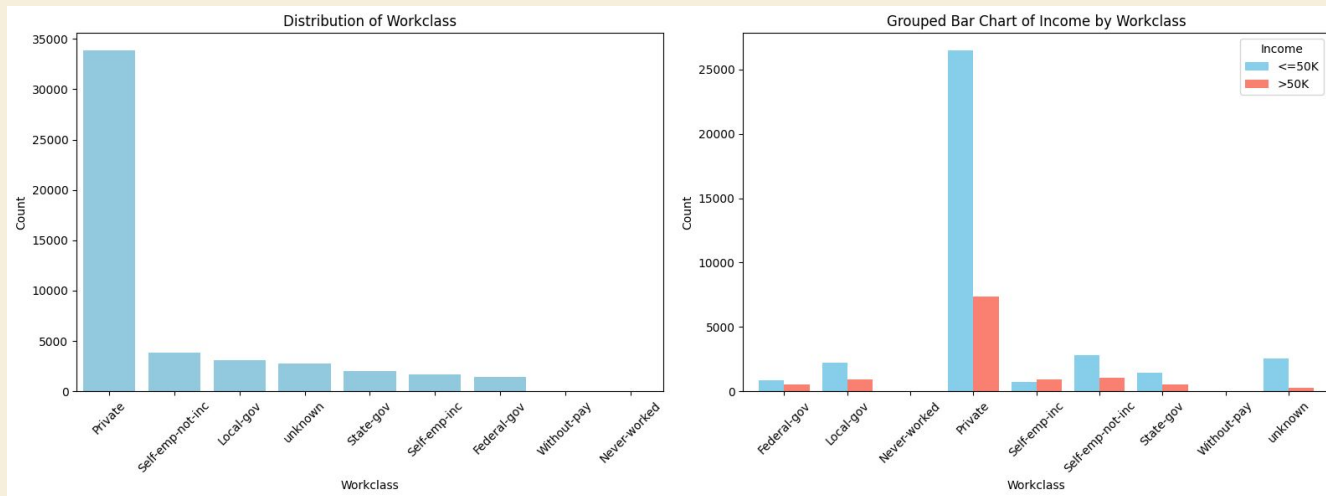


Age vs Income



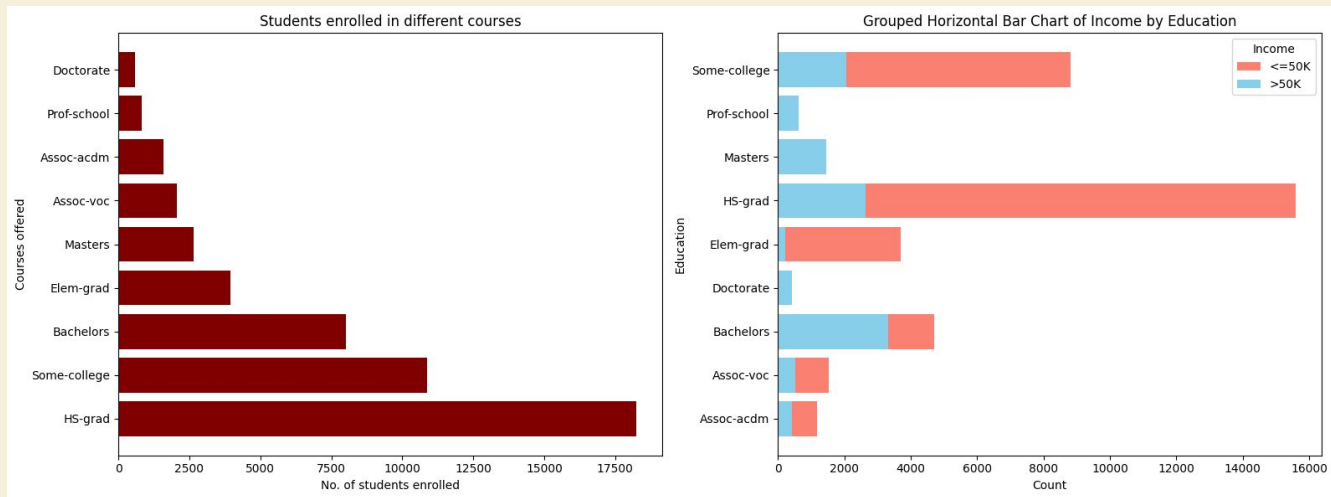
Individuals aged 20 to 29 appear to be more actively engaged in earning incomes of 50k and above.

Work class vs Income



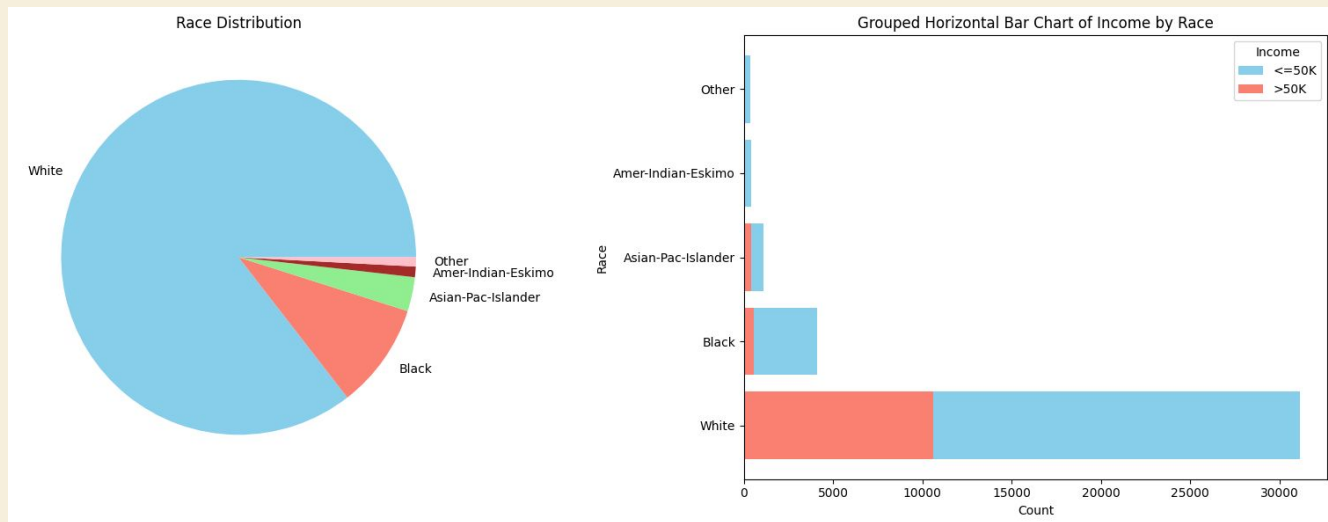
The private sector indicates higher earnings compared to other sectors.

Educational level vs Income



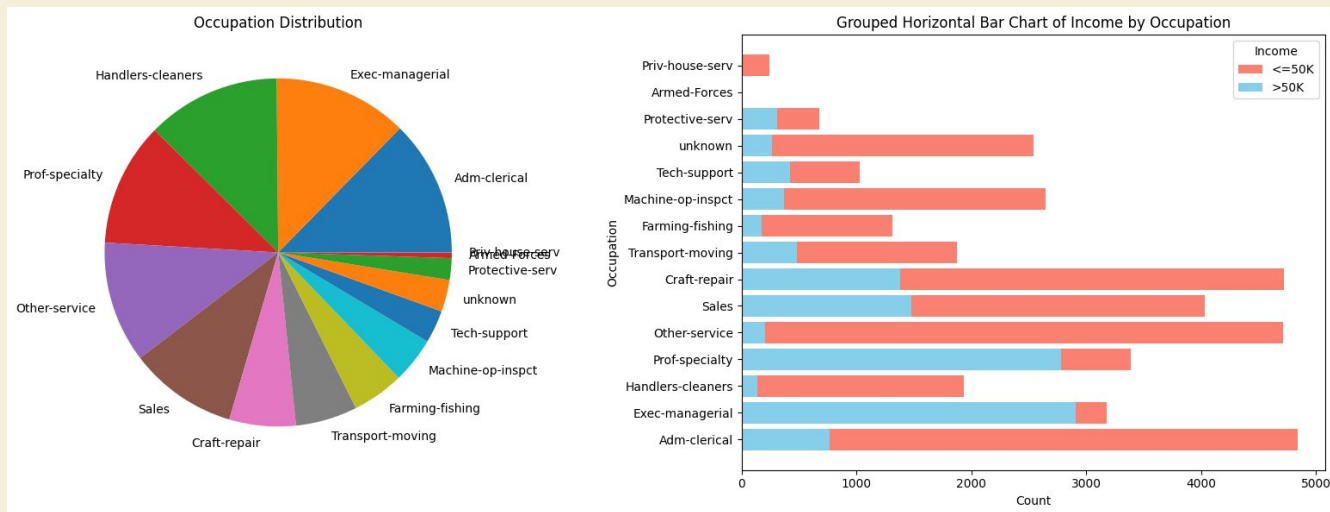
Bachelor's degree holders tend to earn more than individuals with other levels of education.

Race vs Income



White individuals tend to have higher earnings compared to other racial groups.

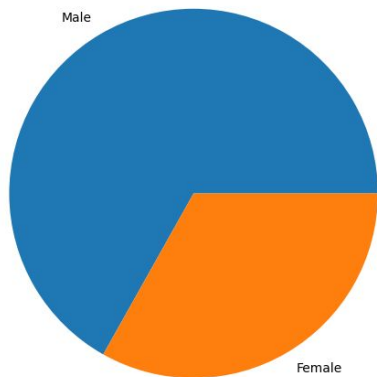
Occupation vs Income



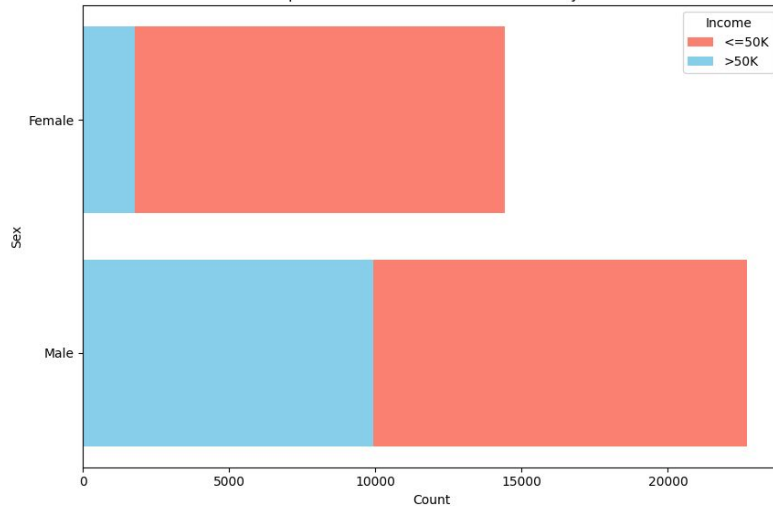
Professionals and Exec-managerial typically earn higher incomes than individuals in other occupations.

Gender vs Income

Sex Distribution



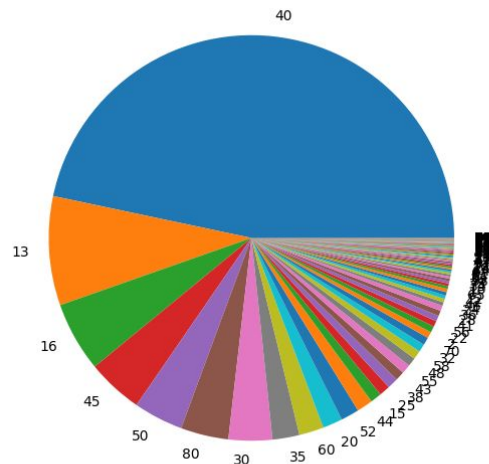
Grouped Horizontal Bar Chart of Income by Sex



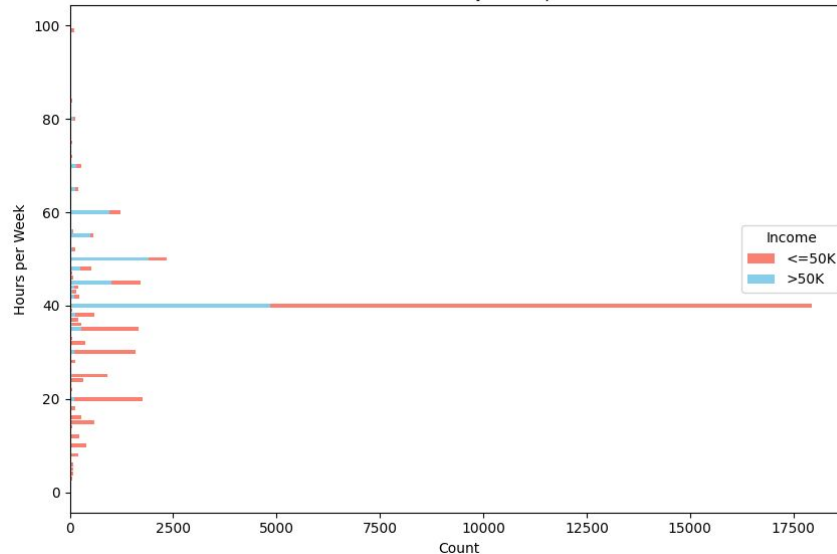
Men tend to have higher earnings than women.

Work hours per week vs Income

Distribution of Hours per Week



Income Distribution by Hours per Week



Individuals who work 40 hours a week tend to have a higher income compared to those with different work schedules.

There is a positive correlation between age and Income ($r = 23\%$)

Individuals aged 20-29 tend to earn more than others, possibly due to several factors:

- They are typically in better physical condition, allowing them to take on more demanding jobs.
- Younger individuals may be more focused on advancing their careers and achieving financial success.

There is a positive correlation between Hours per week and Income ($r = 23\%$)


Individuals who spend more hours working tend to earn more money, potentially due to several factors:

- Increased work hours often lead to higher earnings, as more time spent working correlates with greater income.
- Longer hours on the job provide individuals with more opportunities to gain experience and develop valuable skills, which can result in higher pay.
- Those who dedicate more time to their work may also have greater chances of receiving promotions and advancing in their careers, leading to higher salaries.


There are negative correlation between occupation and Income


it suggests that individuals in certain occupations tend to earn less than those in other occupations, this could be due to various factors:

- nature of the work
- level of education or training required
- demand for skills in the job market
- prevailing wages within different industries.




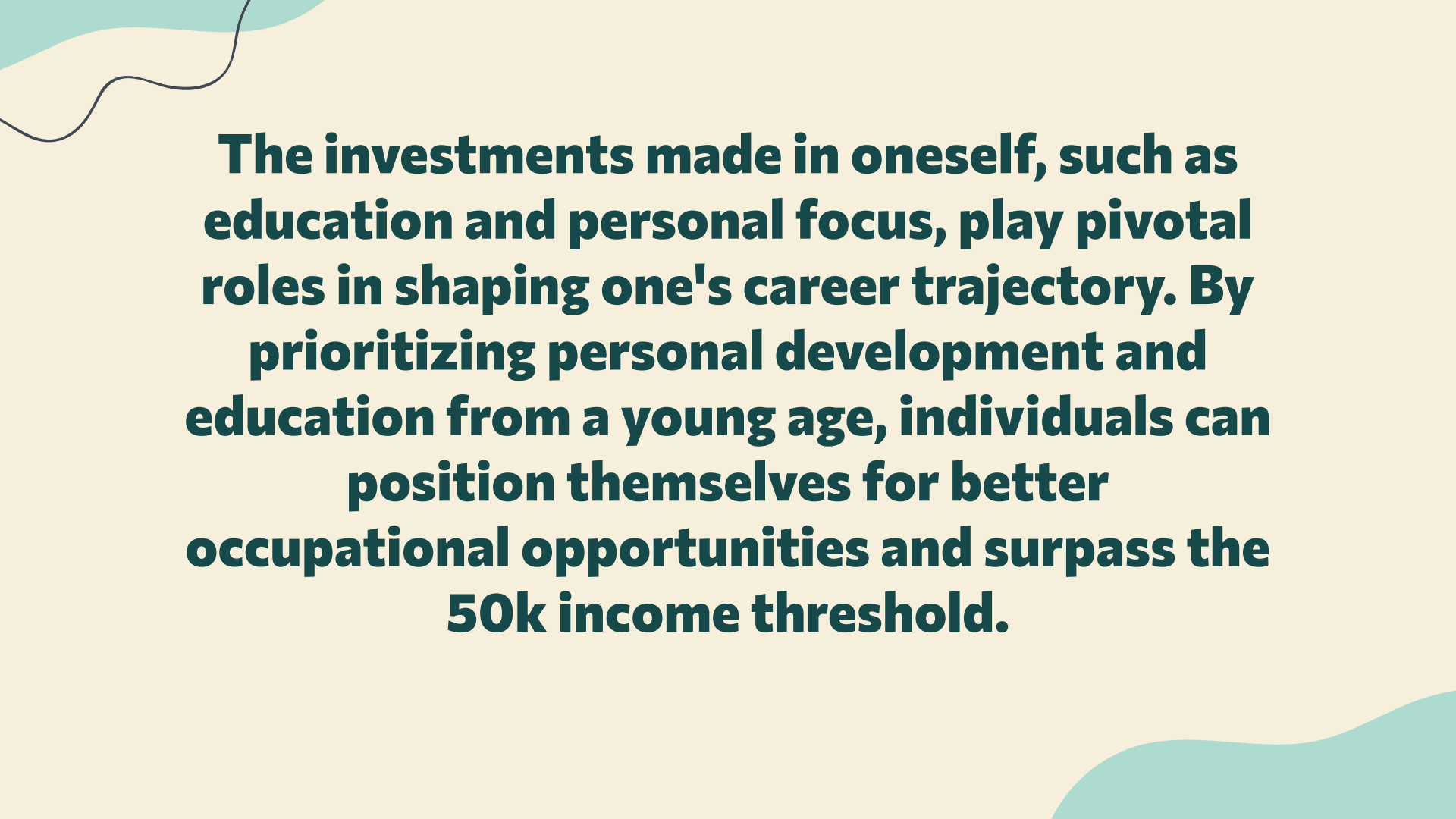
Age and hours per week account for 76.1% of the variance in people earning 50k and above. This suggests that factors such as age and dedication to work play significant roles in achieving success.





Occupation accounts for 23.9% of the variance in people not earning 50k and above. This variation may be influenced by factors such as educational attainment and dedication to work.





The investments made in oneself, such as education and personal focus, play pivotal roles in shaping one's career trajectory. By prioritizing personal development and education from a young age, individuals can position themselves for better occupational opportunities and surpass the 50k income threshold.