

Activity No. 14.1 Build a narrative on a storyboard	
Course Code: CPE311	Program: Computer Engineering
Course Title: Computational Thinking with Python	Date Performed: 05/13/2025
Section: CPE22S3	Date Submitted: 05/13/2025
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1. Discussion (Problem, Statement to Question, and Find Data)	
<p>Build a storyboard outline for ADSE competition.</p> <p>Title: ""HIV Growth Trends Among Filipino Youth Compared to Other ASEAN Nations"</p> <p>What Is HIV?</p> <ul style="list-style-type: none"> - HIV (<i>human immunodeficiency virus</i>) is a virus that attacks cells that help the body fight infection, making a person more vulnerable to other infections and diseases. It is spread by contact with certain bodily fluids of a person with HIV, most commonly during unprotected sex (sex without a condom or HIV medicine to prevent or treat HIV), or through sharing injection drug equipment. <p>Source: https://www.hiv.gov/hiv-basics/overview/about-hiv-and-aids/what-are-hiv-and-aids</p> <p>Problem: HIV cases in minors(ages 0-19) are rising in the Philippines, compared to other ASEAN countries their HIV cases are already on a decline.</p> <p>Questions:</p> <ol style="list-style-type: none"> 1.How can we control HIV cases in PH? 2.Do the factors Education, Income, Religion have a correlation to HIV cases? 3. What role does access to youth-friendly healthcare and sexual education play in HIV prevention? 4.How effective are current government and NGO-led HIV awareness programs among Filipino youth? <hr/> <p>The HIV Situation in the Philippines</p> <p>HIV remains a serious public health issue in the Philippines, especially among youth. As of June 2023, there are 117,946 reported HIV cases, with 29% from ages 15–24. Of youth cases, 98% were due to sexual contact. This World Health Day, we highlight the importance of protecting young people’s health as a basic right—through access to safe, non-discriminatory, quality care.</p> <p>Youth and HIV Data</p> <p>Young people are at higher risk due to misinformation, limited access to services, and stigma. Recent data shows declining HIV awareness—from 95% in 1994 to just 76% in 2021. Only 1 in 5 youth have full HIV</p>	

knowledge, contributing to rising infection rates.

The Need for Comprehensive Sex Education

Comprehensive sex education empowers youth to make informed decisions. Moving beyond abstinence-only programs, inclusive and realistic education helps reduce HIV risk and builds a healthier generation.

The Need for Gender-Affirming HIV and Health Services

MSM and transgender youth face higher HIV risks and healthcare barriers. Gender-affirming care—including respectful communication, confidentiality, and trained providers—encourages greater access to HIV testing and treatment.

Source: <https://www.undp.org/philippines/blog/building-hiv-and-health-literacy-among-young-key>

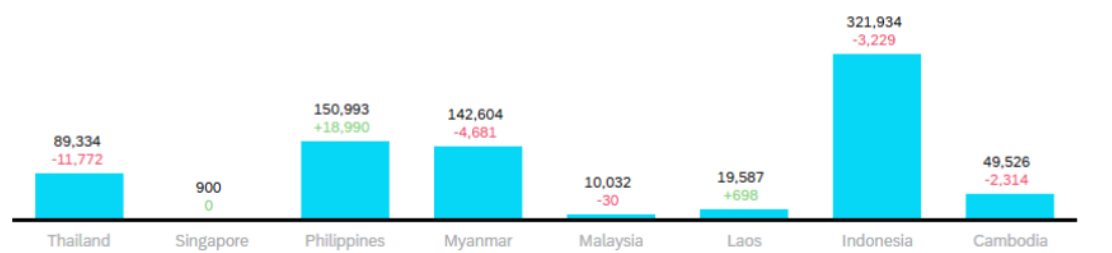
2. Materials and Equipment

- Computer/Desktop
- Access to internet
- Google (For article searching)
- SAP Analytics Cloud
- Jupyter Notebook

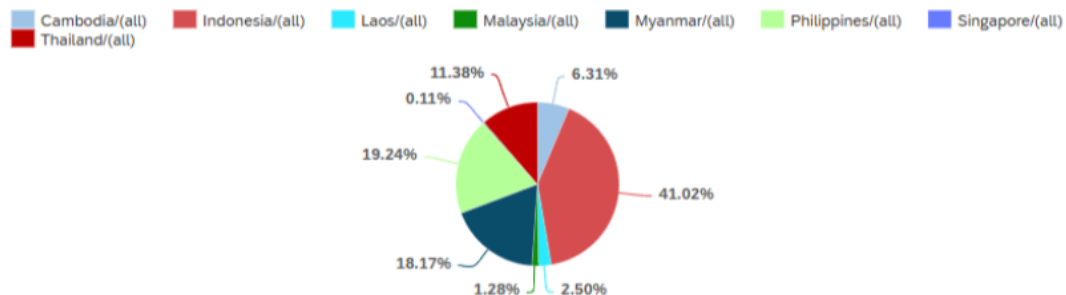
3. Procedure

1. Finding a problem
2. Finding Data set/articles about said problems
3. Cleaning of Data sets
4. Making Data Visualization of data sets
5. Give simple insights
6. Add some “Puff puff” so the general people would understand

4. Output (Visualization)

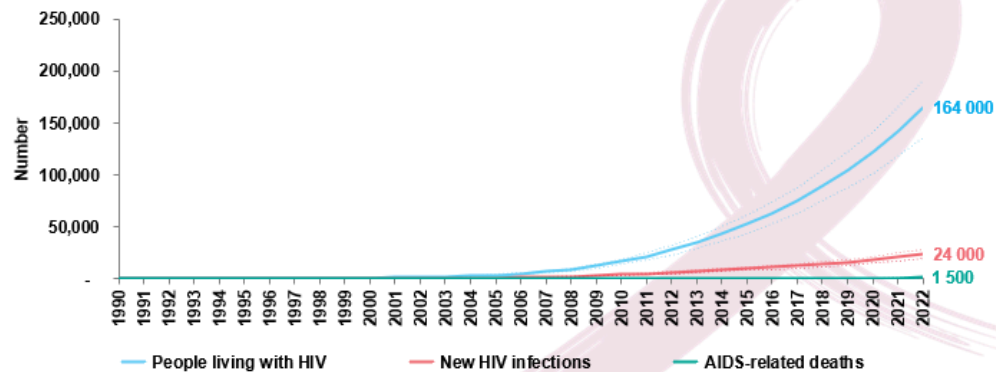


ASEAN countries new HIV count in year 2023 targeted at ages 0-19



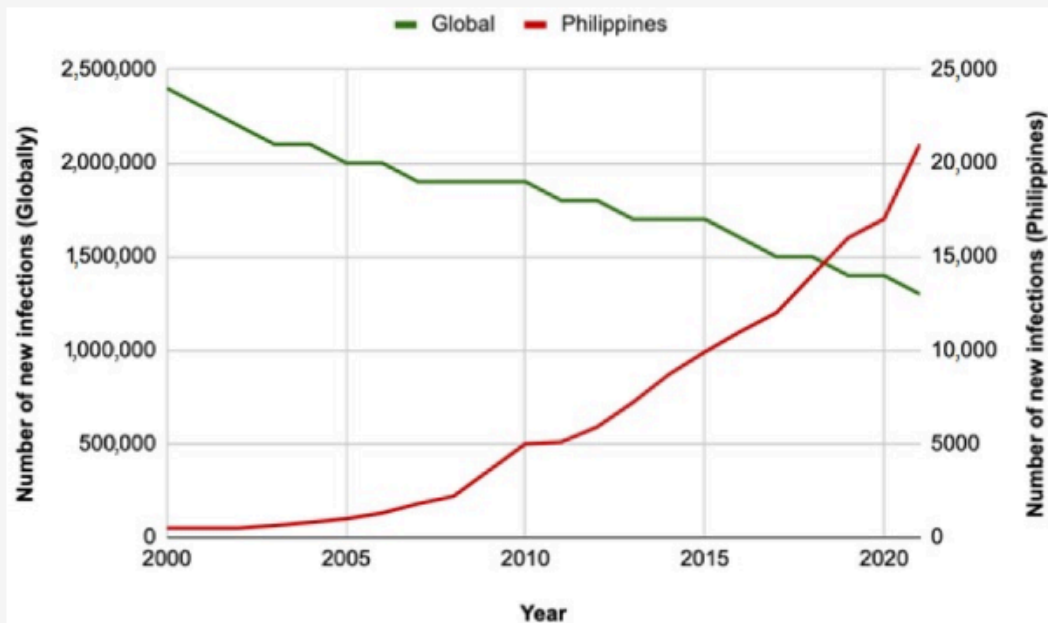
Percentage of ASEAN countries HIV data focused on ages 0-19

Estimated people living with HIV, new HIV infections and AIDS-related deaths, 1990-2022



Source: <https://www.aidsdatahub.org/resource/philippines-country-slides>

Figure 1. Estimated annual new HIV infections among individuals 15 years old and above from 2000–2021 globally and in the Philippines, based on UNAIDS estimates.



Source: <https://www.mdpi.com/2414-6366/8/5/258>

Antiretroviral Therapy (ART)

Newly Enrolled to ART,
Jan- Mar 2024¹⁷

4,055

Median Baseline CD4
at enrollment (in
cells/mm³)¹⁸

220

TREATMENT

PLHIV on ART as of Mar 2024

79,643

Current age (in years)¹⁹

Age Range

1 - 85

Median Age

32

Sex assigned at
birth

Male

76,656

Female

2,985

Source: <https://www.aidsdatahub.org/resource/hiv-aids-surveillance-philippines-oct-dec-2023>

5. Supplementary Activity

- What do you aim to prove with your dataset and visualization?
 - We aim to show that HIV cases among Filipino youth are rising compared to other ASEAN countries, highlighting the urgent need for better education, awareness, and youth-focused healthcare.
- What is the narrative you want to write based on your data
 - Title question: Should kids/teens be aware of HIV?
 - Kids with HIV and why they suffer because of it. (with sources and picture of kid)
 - Show correlation if Education or income relates to HIV
 - Show visualization data that supports kids/teens having HIV
 - Show the consequences if not treated
 - Show mortality rate
 - Recommendation (Why kids should be prioritized on ART treatment)
 - Conclusion

6. Conclusion Individual

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- The exercise revealed that HIV infections among Filipino youths are increasing relative to other ASEAN nations. This emphasizes the necessity for improved sex education, awareness, and access to healthcare. Analysis of data enabled us to comprehend the issue and provide actual solutions. This activity also helped me see my goal for the ADSE competition and made it seem plausible now.

Silang, Elijah Yohance O.

- This activity has helped me understand more about HIV infections among young Filipinos, finding correlation about education was hard but manageable, doing this activity has helped me find doing the ADSE activity more feasible because doing things step by step makes things more clearer.

7. References:

- <https://data.unicef.org/resources/dataset/hiv-aids-statistical-tables/>
- <https://www.undp.org/philippines/blog/building-hiv-and-health-literacy-among-young-key-population#:~:text=According%20to%20the%20June%202023,for%2029%25%20of%20overall%20reported>
- <https://www.mdpi.com/2414-6366/8/5/258>
- <https://www.aidsdatahub.org/resource/hiv-aids-surveillance-philippines-oct-dec-2023>
- https://doh.gov.ph/health-statistics/hiv-sti/?fbclid=IwY2xjawKQO8ZleHRuA2FibQIxMABicmlkETFLcHBmYUlwR2N3VnI1ZzFLAR61W7HnZB8kJJe0ivGOQ8NSpuGXrZJjFWCXd7MR96sj1efXmN_AjuilBmHmSMA_aem_cr9X5R6qKliDSJ0hWkvMAQ

8. Assessment Rubric

Lab Activity Rubric							
Criteria	Ratings						Pts
SO 7 PI 1 Student Outcome 7.1 Acquire and apply new knowledge from outside sources. threshold: 4.8 pts	6 pts Excellent Educational interests and pursuits exist and flourish outside classroom requirements, knowledge and/or experiences are pursued independently and applies knowledge learned into practice	5 pts Good Educational interests and pursuits exist and flourish outside classroom requirements, knowledge and/or experiences are pursued independently	4 pts Satisfactory Look beyond classroom requirements, showing interest in pursuing knowledge independently	3 pts Unsatisfactory Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently	2 pts Poor Relies on classroom instruction only	1 pts Very Poor No initiative or interest in acquiring new knowledge	6 pts
SO 7 PI 2 Student Outcome 7.2 Learn independently threshold: 4.8 pts	6 pts Excellent Completes an assigned task independently and practices continuous improvement	5 pts Good Completes an assigned task without supervision or guidance	4 pts Satisfactory Requires minimal guidance to complete an assigned task	3 pts Unsatisfactory Requires detailed or step-by-step instructions to complete a task	2 pts Poor Shows little interest to complete a task independently	1 pts Very Poor No interest to complete a task independently	6 pts
SO 7 PI 3 Student Outcome 7.3 Critical thinking in the broadest context of technological change threshold: 4.8 pts	6 pts Excellent Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions	5 pts Good Evaluate information from a variety of sources; formulates a clear and precise perspective.	4 pts Satisfactory Analyze information from a variety of sources; formulates a clear and precise perspective.	3 pts Unsatisfactory Apply the gathered information to formulate the problem	2 pts Poor Gather and summarized the information from a variety of sources but failed to formulate the problem	1 pts Very Poor Gather information from a variety of sources	6 pts
SO 7 PI 4 Student Outcome 7.4 Creativity and adaptability to new and emerging technologies threshold: 4.8 pts	6 pts Excellent Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.	5 pts Good Ideas are creative and adapt the new knowledge to solve a problem or address an issue	4 pts Satisfactory Ideas are creative in solving a problem, or address an issue	3 pts Unsatisfactory Shows some creative ways to solve the problem	2 pts Poor Shows initiative and attempt to develop creative ideas to solve the problem	1 pts Very Poor Ideas are copied or restated from the sources consulted	6 pts
Total Points: 24							