



Universidad Nacional  
Autónoma de México

Facultad de ingeniería

Laboratorio de fundamentos  
de programación

*Profesor: Heriberto García Ledezma  
Semestre 2025-1*

*Práctica No. 1*

Nombre de la práctica: La computación como  
herramientas de trabajo del profesional de ingeniería

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Grupo 23

## Creando nuestro primer repositorio

1.- Captura de pantalla del contenido del primer archivo visto desde el repositorio (primera versión del commit)

The screenshot shows a GitHub repository page for 'ReporteP01FP23DavidErnestoRivasTenopala'. The repository is public and has 1 branch and 0 tags. The main branch contains a single commit from 'David-Rivas-Tenopala' titled 'Versión 1 DatosDavidErnestoRivasTenopala' made 6 minutes ago. The commit message includes the file 'DatosDavidErnestoRivasTenopala'. On the right side, there is an 'About' section with no description, website, or topics provided. It also shows activity (0 stars, 0 watching, 0 forks) and release information (no releases published). Below the commit, there is a 'README' section with a button to 'Add a README'.

The screenshot shows the same GitHub repository page, but now focusing on the 'DatosDavidErnestoRivasTenopala' file. The file content is displayed as follows:

```
1 David Ernesto Rivas Tenopala
2 Enchiladas verdes
3 Perros
4 Un show más
5 Hacer ejercicio
```

Captura de pantalla de la sección de administración del repositorio donde se ven los archivos que contiene el repositorio.

The screenshot shows a GitHub repository page for 'ReporteP01FP23DavidErnestoRivasTenopala'. The repository is public and contains 1 branch and 0 tags. The main file listed is 'DatosDavidErnestoRivasTenopala' (Versión 4 update de DatosDavidErnestoRivasTenopala). The repository has 3 commits, 0 stars, 0 forks, and 0 watching. There is a 'README' section with a placeholder for adding a README file. The sidebar shows other files like 'FUNDAMENTOS\_MANUAL.pdf' and 'escudo\_fi\_color.png'.

Cambios hechos en la versión 4 y 5 del archivo DatosDavidErnestoRivasTenopala

The screenshot shows the commit history for the 'DatosDavidErnestoRivasTenopala' file. The latest commit is 'Versión 4 update de DatosDavidErnestoRivasTenopala' by 'David-Rivas-Tenopala' at 'e4b9ff6 · now'. The commit message includes a link to 'History'. The commit details show 9 lines (9 loc) and 151 Bytes, with a note that it's 55% faster with GitHub Copilot. The commit content lists the following changes:

```
1 David Ernesto Rivas Tenopala
2 Enchiladas verdes
3 Perros
4 Un show mas
5 Hacer ejercicio
6 322187597
7 ferteno255226@gmail.com
8 Hip/Hop
9 My eyes - Travis Scott
```

A screenshot of a GitHub repository page titled "ReporteP01FP23DavidErnestoRivasTenopala / DatosDavidErnestoRivasTenopala". The left sidebar shows files like "main", "FUNDAMENTOS\_MANUAL.pdf", and "escudo\_fi\_color.png". The main area displays a commit history with 10 entries:

```
1 David Ernesto Rivas Tenopala
2 Enchiladas verdes
3 Perros
4 Un show más
5 Hacer ejercicio
6 322187597
7 ferten0255226@gmail.com
8 Hip/Hop
9 My eyes - Travis Scott
10 Boxeo
```

Captura de pantalla donde se pueda ver el número de commits realizado.

A screenshot of the GitHub repository "ReporteP01FP23DavidErnestoRivasTenopala". The top navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The search bar shows "Type ⌘ to search". The main section is titled "Commits" and lists five commits:

- Commits on Aug 22, 2024
  - Versión 5 Update DatosDavidErnestoRivasTenopala** Verified 780f64c Copilot ...  
David-Rivas-Tenopala committed 7 minutes ago
  - Versión 4 update de DatosDavidErnestoRivasTenopala** Verified e4b9ff6 Copilot ...  
David-Rivas-Tenopala committed 12 minutes ago
  - Versión 3 Archivo PDF** Verified 5e19d16 Copilot ...  
David-Rivas-Tenopala committed 43 minutes ago
  - Versión 2 Escudo de FI** Verified 223b4d6 Copilot ...  
David-Rivas-Tenopala committed 49 minutes ago
  - Versión 1 DatosDavidErnestoRivasTenopala** Verified 8e0de80 Copilot ...  
David-Rivas-Tenopala committed 1 hour ago

Link del repositorio

<https://github.com/David-Rivas-Tenopala/ReporteP01FP23DavidErnestoRivasTenopala>

Operador :signo menos ( - ), se utilizo el buscador google con el operador (-), para excluir todas aquellas página relacionadas con wikipedia.

The screenshot shows a Google search results page with the query "obesidad -wikipedia". The top result is from gob.mx, titled "¿Qué es la obesidad y cuáles son sus síntomas?". The snippet describes obesity as a chronic disease caused by excessive consumption of fats, sugars, and carbohydrates, leading to fat accumulation. It also mentions low or no physical activity. To the right of the snippet is a cartoon illustration of three people of different sizes (thin, normal, and obese) standing next to various food items like a donut, a sandwich, and a soda. Below the main snippet is a section titled "Más preguntas" with expandable questions about obesity and its causes.

Operador: filetype:pdf, se realizó la búsqueda de archivos PDF, que incluyeran información acerca de la obesidad.

The screenshot shows a Google search results page with the query "obesidad filetype:pdf". The top result is from the Cámara de Diputados, titled "Sobrepeso y obesidad en México: afectaciones a la salud". The snippet discusses obesity as a risk factor for diabetes type 2, hypertension, cardiovascular diseases, certain types of cancer, and other health problems. It notes that obesity is a problem from childhood. To the right of the snippet is a section titled "Más preguntas" with expandable questions about obesity and its health effects. At the bottom of the page, there is a link to an IMSS document titled "Diagnóstico y tratamiento del sobrepeso y obesidad exógena".

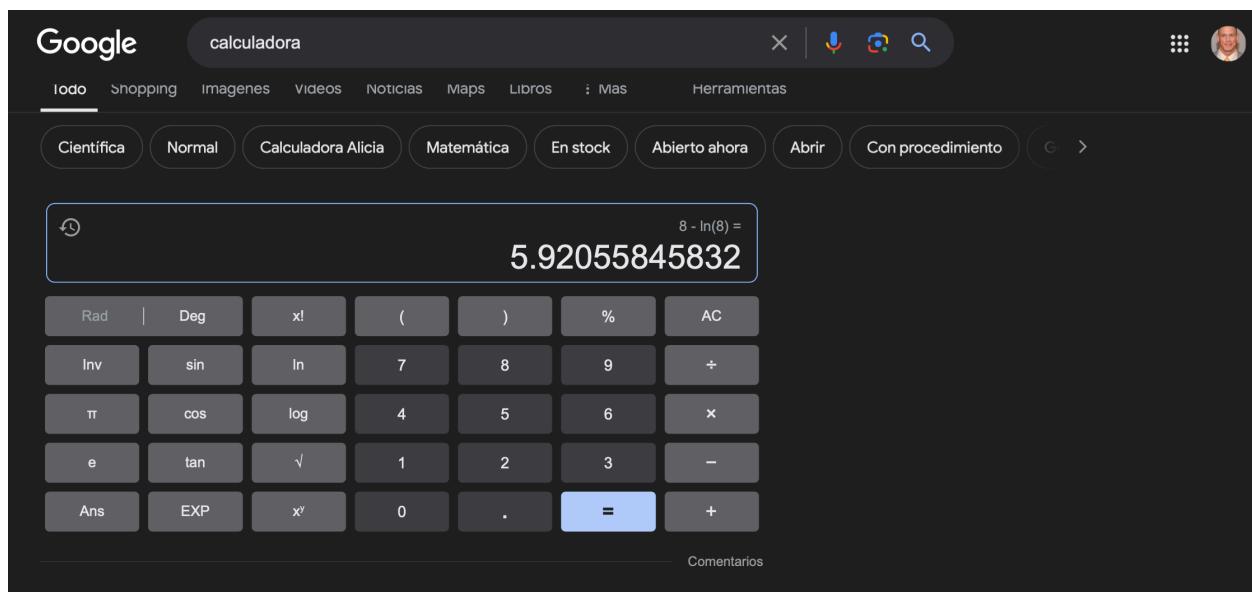
Operador: comillas dobles ( “ ” ), fue utilizado para encontrar páginas en las que haya coincidencias exactas.

The screenshot shows a Google search results page with the query "obesidad causas". The first result is from NHLBI (National Heart, Lung, and Blood Institute) titled "Sobrepeso y obesidad - Causas y factores de riesgo - NHLBI". The page content discusses risk factors for obesity, including lack of physical activity, unhealthy eating habits, insufficient sleep, stress, medical conditions, genetics, medications, and the environment. It also defines obesity as a condition characterized by excessive body fat, which increases the risk of health problems. The page includes a diagram showing abdominal fat accumulation around organs (visceral) and under the skin (subcutaneous). A sidebar on the right provides a summary of obesity, symptoms, treatments, and related topics.

Operador: define:, fue utilizado para conocer el significado de compendio.

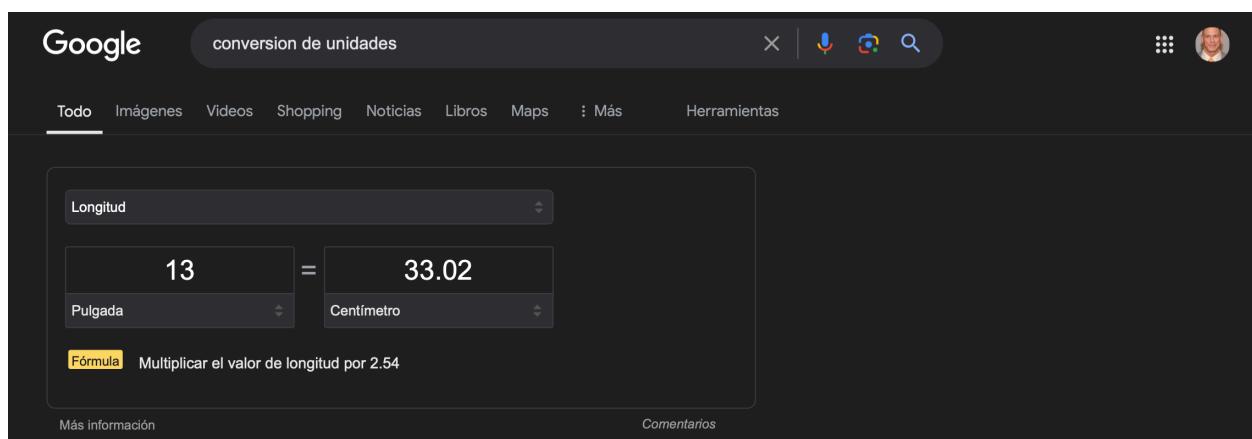
The screenshot shows a Google search results page with the query "define:compendio". The top result is from the Real Academia Española's dictionary, defining "compendio" as a brief and summary exposition, either oral or written, of the most substantial part of a subject matter. It also lists "EL SALVADOR" and "complicación" as related terms. A sidebar on the right shows a snippet for "Compendio" from Wikipedia, stating it is the name given to a brief but precise compilation.

## Calculadora



The screenshot shows the Google search interface with the query "calculadora" entered. Below the search bar, there are several filter buttons: Científica (Scientific), Normal, Calculadora Alicia, Matemática, En stock (In stock), Abierto ahora (Open now), Abrir (Open), and Con procedimiento (With steps). A large digital calculator is displayed, showing the calculation  $8 - \ln(8) = 5.92055845832$ . The calculator has a standard layout with buttons for Rad/Deg, trigonometric functions (Inv, sin, cos, tan), logarithms (ln, log), and arithmetic operations (+, -, ×, ÷, %, AC). The result is highlighted with a blue border.

Conversión de unidades, Pulgada-Centímetro.



The screenshot shows the Google search interface with the query "conversion de unidades" entered. Below the search bar, there are filter buttons: Todo (All), Imágenes, Videos, Shopping, Noticias, Libros, Maps, Más (More), and Herramientas. A unit conversion calculator is shown, specifically for length. It converts 13 inches (Pulgada) to 33.02 centimeters (Centímetro). A formula note indicates that the value is multiplied by 2.54. The calculator interface includes dropdown menus for selecting units and a "Más información" (More information) link at the bottom.

Gráficas de funciones. Graficar la función  $\cos(x)$  en el intervalo de  $\pi$  a  $-\pi$



Google scholar, se realizó la búsqueda en relación a temas de electromagnetismo.

A screenshot of the Google Scholar search interface. The search term "electromagnetismo" is entered in the search bar. The results page shows a sidebar on the left with filters: "Artículos", "Cualquier momento" (Desde 2024, Desde 2023, Desde 2020, Intervalo específico...), "Ordenar por relevancia" (Ordenar por fecha), "Cualquier idioma" (Buscar solo páginas en español), "Cualquier tipo" (Artículos de revisión), and checkboxes for "incluir patentes" and "incluir citas". The main content area displays several search results, each with a title, author, year, and a snippet of the abstract. For example, the first result is "LIBRO Electromagnetismo aplicado" by MA Plonus, published in 1994. Other results include books by AS Soto, DK Cheng, and P Cordero. Each result has a "Guardar" button, a "Citar" button, a "Citado por" count, and a "Artículos relacionados" link.

# Trigonometry.

Publicado en: Salem Press Encyclopedia of Science, 2022, Research Starters

Por: Caulfield, Michael J., B.S., M.S., Ph.D.

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## Summary

Trigonometry is the study of triangles, namely the relationship between their three angles and three sides. It is concerned with both planar (two-dimensional) and spherical (three-dimensional) triangles. Any situation that involves angles or triangles can be seen as an application of trigonometry. For example, surveyors often measure one distance and two angles of a triangle as aids in marking boundaries. Trigonometry provides the other two distances and the other angle. In fields such as optics or acoustics, light and sound waves can be expressed in terms of sine, one of the six trigonometric functions.

## Definition and Basic Principles

Trigonometry is the study of triangles, namely the relationships that exist between the measures of the three interior angles and the lengths of the three sides. To solve a triangle, one must determine the measures of each of its angles and the lengths of each of its sides. This is frequently done by means of the trigonometric ratios, especially the two primary ones, sine and [cosine](#).



The Canadarm2 robotic manipulator on the International Space Station is operated by controlling the

In [Euclidean geometry](#), the sum of the measures of the interior angles of any plane triangle is 180 degrees. (However, for spherical triangles that total is always more than 180 degrees and is not always the same.) Thus for any plane triangle, if two angle measures are known, the third is immediately deduced. By means of this fact and others, principally the [Pythagorean theorem](#), the law of sines, and the law of cosines, any

## Creación del sitio web

The image shows a Google Slides presentation. At the top left, there's a blue folder icon with the text "PRUEBA FI". On the right side, there are various icons for file operations like save, copy, and share. Below the header, the status bar says "Se guardaron todos los cambios en Drive". The main content area has a dark background with a hexagonal pattern. A large yellow title "MÚSICA" is centered in a white rounded rectangle with blue borders. Above the title is a small toolbar with icons for edit, copy, and paste. Below the title are two images: one on the left showing a person on stage with balloons, and one on the right showing a person in a plaid shirt standing in front of a flag with stars. To the right of the slide, there's a sidebar with sections for "Insertar" (Insert), "Páginas" (Pages), "Temas" (Themes), and "BLOQUES DE CONTENIDO" (Content blocks). The "BLOQUES DE CONTENIDO" section contains several image and text blocks. A vertical navigation bar on the far right lists various slide components: "Grupo que se puede contraer" (Group that can be collapsed), "Índice" (Index), "Carousel de imágenes" (Image carousel), "Botón" (Button), "Línea divisoria" (Dividing line), "Separador" (Separator), and "Vínculos a redes sociales" (Links to social networks).

**Link del sitio:** <https://sites.google.com/view/fp23-251-dert/p%C3%A1gina-principal>

**Link del cuestionario:** <https://forms.gle/yRuVQU9x37q23jp77>

## Captura de la hoja de cálculo del cuestionario