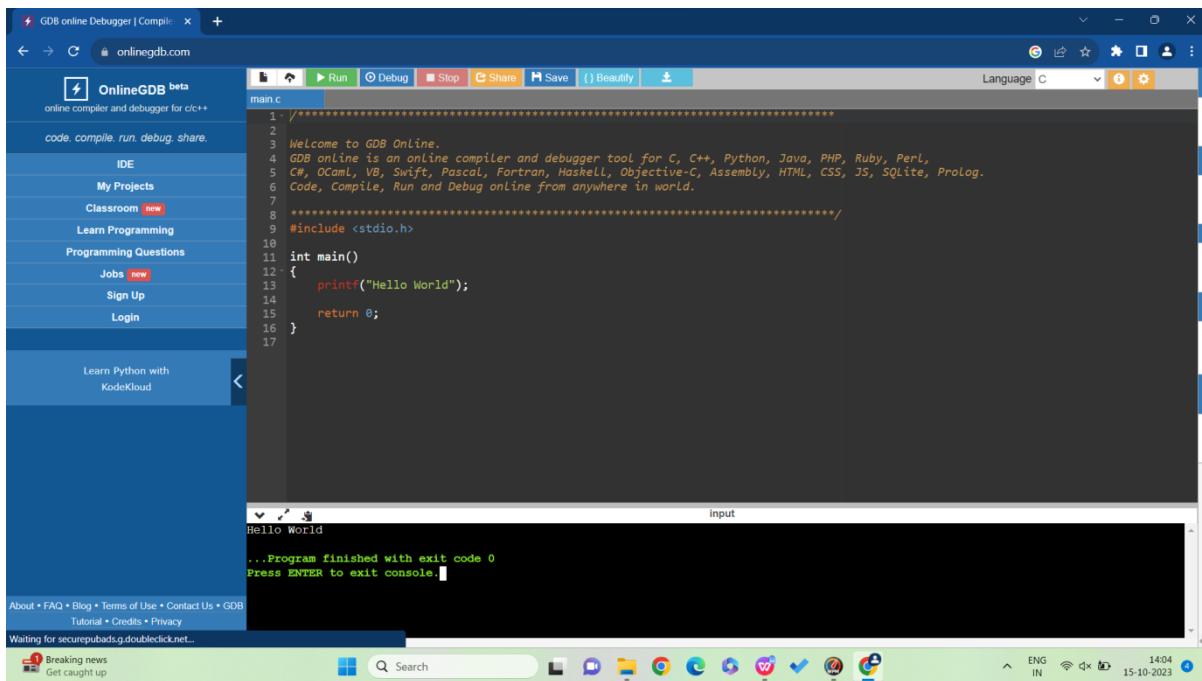


# PRACTICAL 1

## AIM: Execute C Program using gcc compiler

### PROGRAM 1: PRINT THE HELLO WORLD USING C PROGRAM:



The screenshot shows the OnlineGDB beta IDE interface. On the left, there's a sidebar with links like 'My Projects', 'Classroom', 'Learn Programming', 'Programming Questions', 'Jobs', 'Sign Up', and 'Login'. The main area has tabs for 'main.c' and 'Run'. The code editor contains the following C code:

```

1 //*****
2 //***** Welcome to GDB Online.
3 //***** GDB online is an online compiler and debugger tool for C, C++, Python, Java, PHP, Ruby, Perl,
4 //***** C#, OCaml, VB, Swift, Pascal, Fortran, Haskell, Objective-C, Assembly, HTML, CSS, JS, SQLite, Prolog.
5 //***** Code, Compile, Run and Debug online from anywhere in world.
6 //*****
7
8 //*****
9 #include <stdio.h>
10
11 int main()
12 {
13     printf("Hello World");
14
15     return 0;
16 }

```

Below the code editor is a terminal window showing the output:

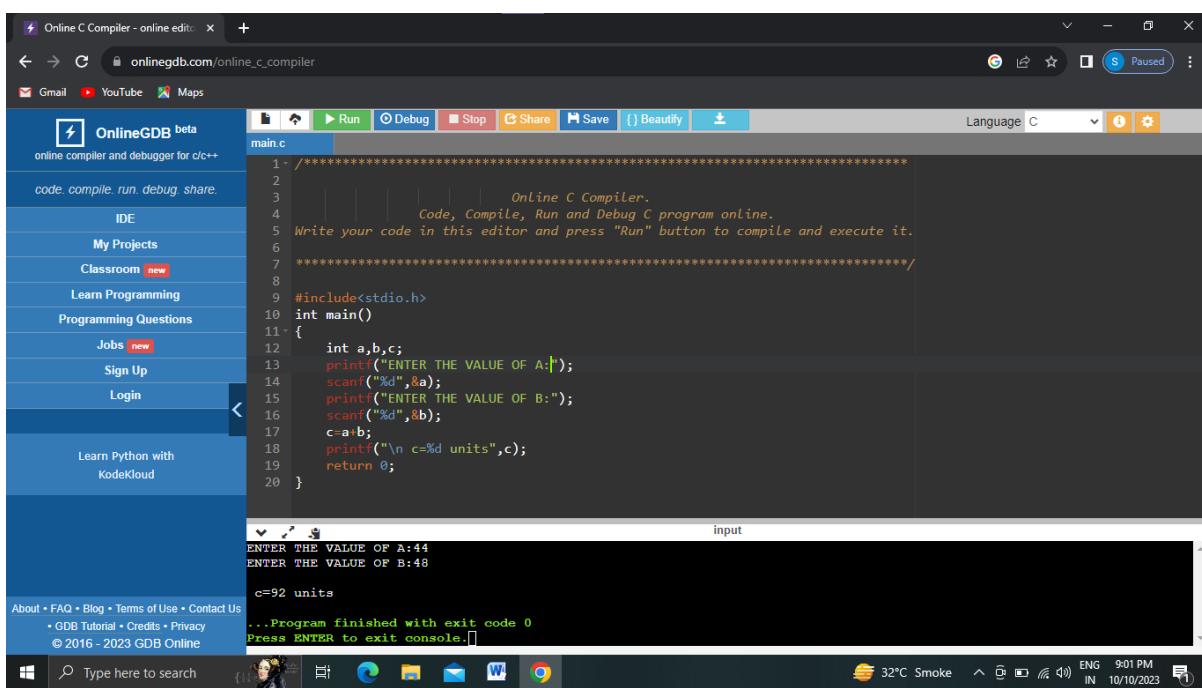
```

Hello World
...Program finished with exit code 0
Press ENTER to exit console.

```

The status bar at the bottom right shows the date and time as 15-10-2023.

### PROGRAM 2: WRITE A C PROGRAM TO ADD TWO NUMBERS :



The screenshot shows the OnlineCCompiler interface. The sidebar is identical to the previous screenshot. The code editor contains the following C code:

```

1 //*****
2 //***** Online C Compiler.
3 //***** Code, Compile, Run and Debug C program online.
4 //***** Write your code in this editor and press "Run" button to compile and execute it.
5 //*****
6
7 //*****
8 #include<stdio.h>
9 int main()
10 {
11     int a,b,c;
12     printf("ENTER THE VALUE OF A:");
13     scanf("%d",&a);
14     printf("ENTER THE VALUE OF B:");
15     scanf("%d",&b);
16     c=a+b;
17     printf("\n c=%d units",c);
18     return 0;
19 }

```

Below the code editor is a terminal window showing the interaction:

```

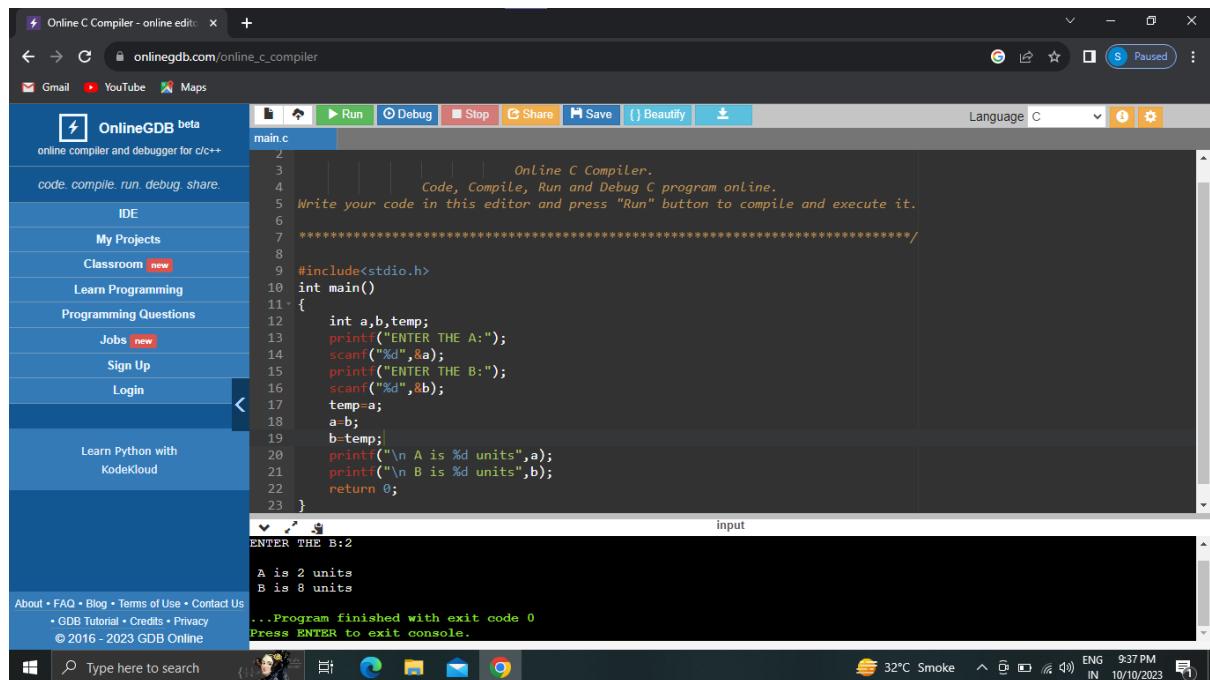
ENTER THE VALUE OF A:44
ENTER THE VALUE OF B:48
c=92 units
...Program finished with exit code 0
Press ENTER to exit console.

```

The status bar at the bottom right shows the date and time as 10/10/2023.

## PROGRAM 3: WRITE A C PROGRAM TO SWAP TWO NUMBERS:

---



The screenshot shows the OnlineGDB beta IDE interface. The code editor contains the following C program:

```

main.c
1 /*
2      |-----| Online C Compiler.
3      |-----| Code, Compile, Run and Debug C program online.
4      |-----| Write your code in this editor and press "Run" button to compile and execute it.
5 ****
6
7 ****
8
9 #include<stdio.h>
10 int main()
11 {
12     int a,b,temp;
13     printf("ENTER THE A:");
14     scanf("%d",&a);
15     printf("ENTER THE B:");
16     scanf("%d",&b);
17     temp=a;
18     a=b;
19     b=temp;
20     printf("\n A is %d units",a);
21     printf("\n B is %d units",b);
22     return 0;
23 }

```

The terminal window below shows the output of the program when run with input '2' and '8':

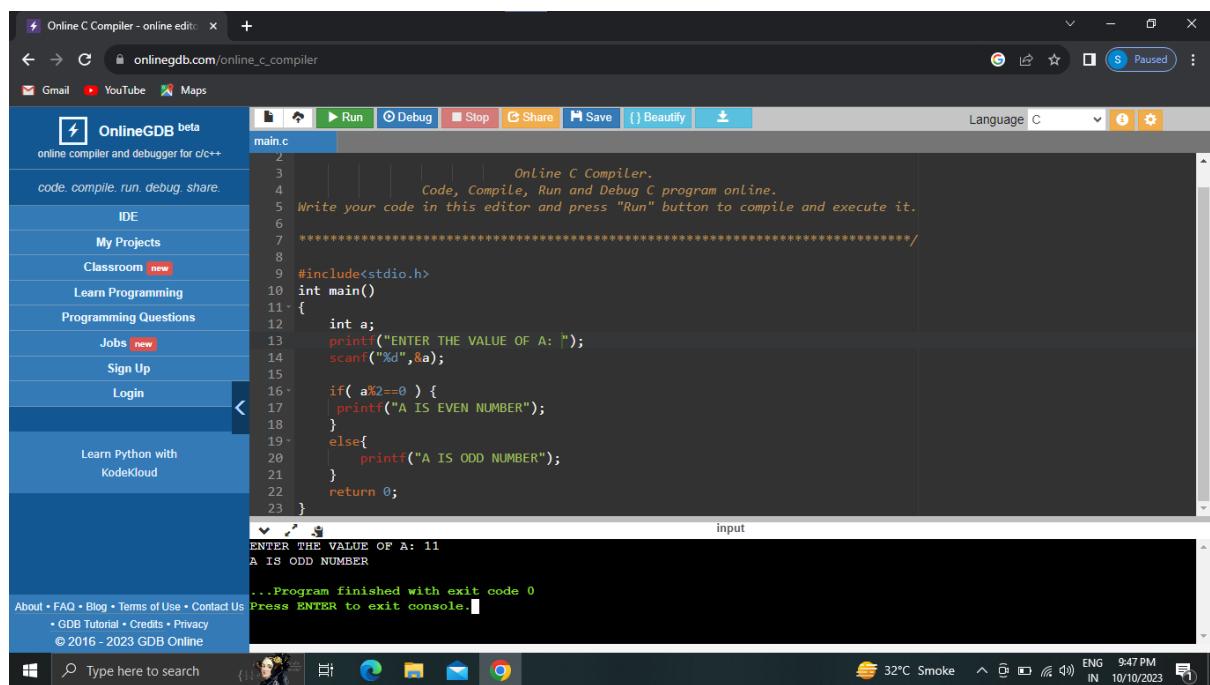
```

input
ENTER THE B:2
A is 2 units
B is 8 units
...Program finished with exit code 0
Press ENTER to exit console.

```

## PROGRAM 4: WRITE A C PROGRAM TO FIND THE ODD OR EVEN NUMBER:

---



The screenshot shows the OnlineGDB beta IDE interface. The code editor contains the following C program:

```

main.c
1 /*
2      |-----| Online C Compiler.
3      |-----| Code, Compile, Run and Debug C program online.
4      |-----| Write your code in this editor and press "Run" button to compile and execute it.
5 ****
6
7 ****
8
9 #include<stdio.h>
10 int main()
11 {
12     int a;
13     printf("ENTER THE VALUE OF A: ");
14     scanf("%d",&a);
15
16     if( a%2==0 ) {
17         printf("A IS EVEN NUMBER");
18     }
19     else{
20         printf("A IS ODD NUMBER");
21     }
22     return 0;
23 }

```

The terminal window below shows the output of the program when run with input '11':

```

input
ENTER THE VALUE OF A: 11
A IS ODD NUMBER
...Program finished with exit code 0
Press ENTER to exit console.

```

## PRACTICAL 2

### AIM: Create Presentation using Google Slides.

The screenshot shows a Google Slides presentation titled "A.I". The main slide features a large image of a blue, metallic humanoid robot standing on a digital circuit board. Overlaid on the image is the text "ARTIFICIAL INTELLIGENCE". The left sidebar displays six slide thumbnails:

- 1: A blue robot arm.
- 2: A brain icon labeled "CONTENTS".
- 3: A person icon labeled "WHAT IS ARTIFICIAL INTELLIGENCE".
- 4: A circular icon labeled "DIFFERENT TYPES OF AI".
- 5: A brain icon labeled "AI vs Human AI".
- 6: A person icon labeled "MACHINE GENERAL INTELLIGENCE (MGI)".

The status bar at the bottom indicates it's 09:16 on 15-10-2023, with a weather of 27°C and haze.

The screenshot shows a Google Slides presentation titled "A.I". The main slide is titled "CONTENTS" in large, bold letters. To the right of the title is a list of bullet points:

- WHAT IS ARTIFICIAL INTELLIGENCE??
- TYPES OF ARTIFICIAL INTELLIGENCE
- APPLICATIONS OF AI
- CHALLENGES FACES BY AI
- FUTURE OF AI

The left sidebar displays the same six slide thumbnails as the previous screenshot. The status bar at the bottom indicates it's 09:16 on 15-10-2023, with a weather of 27°C and haze.

Google Slides window showing a presentation titled "A.I.pptx". The slide content is as follows:

## WHAT IS ARTIFICIAL INTELLIGENCE??

• AI, or Artificial Intelligence, refers to the simulation of human intelligence in machines that are programmed to think and learn like humans. It is a broad field of computer science focused on creating systems and technologies that can perform tasks that typically require human intelligence. AI systems aim to mimic human cognitive functions such as problem-solving, reasoning, learning, perception, and language understanding.

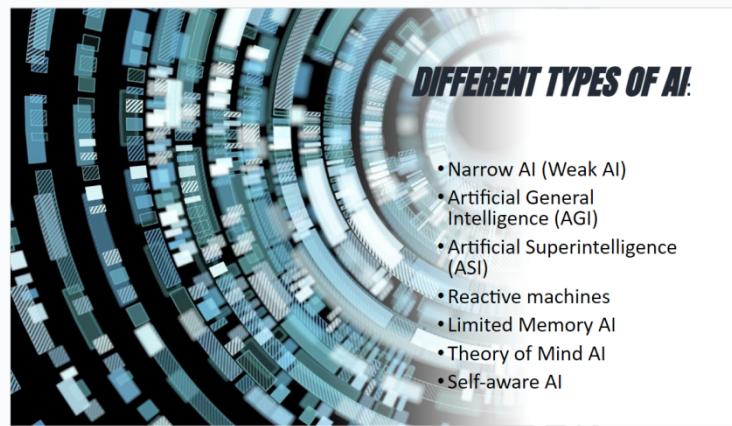


The presentation also includes a sidebar with six thumbnail images and a navigation bar at the bottom.

Google Slides window showing a presentation titled "A.I.pptx". The slide content is as follows:

## DIFFERENT TYPES OF AI.

- Narrow AI (Weak AI)
- Artificial General Intelligence (AGI)
- Artificial Superintelligence (ASI)
- Reactive machines
- Limited Memory AI
- Theory of Mind AI
- Self-aware AI



The presentation also includes a sidebar with six thumbnail images and a navigation bar at the bottom.

Google Slides presentation titled "A.I.pptx" showing slide 5, "Narrow AI (Weak AI)".

The slide contains a diagram of a neural network with multiple layers of nodes connected by lines, representing a narrow AI system.

**Narrow AI (Weak AI):**

- Narrow AI is designed for a specific task or a narrow range of tasks.
- It excels in a well-defined domain but lacks general intelligence.
- Examples include virtual personal assistants like Siri, chatbots, recommendation systems, and image recognition software.

Navigation bar at the bottom shows slide 5 of 13, search bar, and system status.

Google Slides presentation titled "A.I.pptx" showing slide 6, "Artificial General Intelligence (AGI)".

The slide contains a diagram of a complex molecular structure with many nodes and connections, representing AGI.

**Artificial General Intelligence (AGI):**

- AGI, also known as strong AI, possesses human-like intelligence and can perform any intellectual task that a human can do.
- It has the ability to understand, learn, and apply knowledge across a wide range of domains.
- AGI is still largely theoretical and does not exist in practice yet.

Navigation bar at the bottom shows slide 6 of 13, search bar, and system status.

**Artificial Superintelligence (ASI):**

- ASI represents an advanced form of AI that surpasses human intelligence in all aspects.
- It can solve complex problems, make decisions, and innovate at a level far beyond human capabilities.
- ASI is a concept often discussed in science fiction and philosophical debates and does not currently exist.

**Reactive Machines:**

- Reactive machines are the simplest form of AI and can only perform predefined tasks based on programmed rules.
- They do not learn from experience or adapt to new situations.
- Chess-playing programs like IBM's Deep Blue are examples of reactive machines

Google Slides window showing a presentation slide about Limited Memory AI.

The slide features a central image of a computer chip with binary code (0s and 1s) floating above it, set against a green circuit board background. To the right of the image is the title **Limited Memory AI:**

**Limited Memory AI:**

- Limited Memory AI systems have the ability to learn from historical data and make decisions based on past experiences.
- They can adapt to some extent but are still limited in their scope.
- Self-driving cars use limited memory AI to navigate and make driving decisions

The left sidebar shows a thumbnail of the slide and other slides in the deck, including "Theory of Mind AI". The bottom status bar shows system information like battery level, signal strength, and date/time (15-10-2023).

Google Slides window showing a presentation slide about Theory of Mind AI.

The slide features a central image of a brain composed of yellow spheres connected by a network of lines, set against a teal background. To the left of the image is the title **Theory of Mind AI:**

**Theory of Mind AI:**

- Theory of Mind AI represents a hypothetical type of AI that can understand human emotions, beliefs, and intentions.
- It would have the capacity to engage in social interactions and empathize with humans.
- This type of AI is still largely speculative and is not yet realized.

The left sidebar shows a thumbnail of the slide and other slides in the deck, including "Limited Memory AI". The bottom status bar shows system information like battery level, signal strength, and date/time (15-10-2023).

**A.I.pptx**

File Edit View Insert Format Slide Arrange Tools Help

Background Layout Theme Transition

9 10 11 12 13

## Self-aware AI

- Self-aware AI would have consciousness and self-awareness, similar to human beings.
- It would possess a sense of identity, subjective experience, and the ability to reflect on its own existence.
- Self-aware AI remains a topic of philosophical debate and does not currently exist.
- It's important to note that while some types of AI, like narrow AI and limited memory AI, are prevalent in today's technology, others, like AGI, ASI, and self-aware AI, are still largely theoretical or exist only in the realm of science fiction and philosophical discussions. AI development continues to advance, and the field is constantly evolving.

28°C Haze

Search

ENG IN 09:26 15-10-2023

**A.I.pptx**

File Edit View Insert Format Slide Arrange Tools Help

Background Layout Theme Transition

9 10 11 12 13

## APPLICATIONS OF AI

- **Medical Diagnosis:** AI systems can analyze medical data, such as images and patient records, to assist in diagnosing diseases and conditions.
- **Health Monitoring:** Wearable devices with AI can track vital signs and alert users or healthcare providers to potential health issues.
- **Self-Driving Cars:** AI enables vehicles to perceive their environment, make driving decisions, and navigate autonomously.
- **Drones:** AI-powered drones are used in agriculture, surveillance, and delivery services.
- **Facial Recognition:** AI systems can identify and verify individuals' faces for security and authentication.

ENG - AFG in 5 hours

Search

ENG IN 09:26 15-10-2023

**CHALLENGES FACES BY AI**

Data Privacy and Security: The collection and use of vast amounts of personal data by AI applications raise concerns about data privacy and the potential for data breaches. Striking a balance between innovation and protecting individuals' privacy is an ongoing challenge.

- Lack of Data: AI systems typically require large amounts of high-quality data to function effectively. In some domains, such as rare diseases or emerging technologies, data scarcity is a significant challenge.
- Ethical Concerns: AI raises ethical questions, such as whether machines should have the capability to make life-and-death decisions (e.g., autonomous weapons) and concerns about the impact of AI on employment and society.
- Transparency and Explainability: Many AI models, particularly deep learning neural networks, are often considered "black boxes" because it's challenging to understand how they arrive at their decisions. This lack of transparency raises concerns about accountability and trustworthiness.

**FUTURE OF AI:**

The future of AI holds significant promise and potential for transformative advancements in various domains. While it's challenging to predict the future with certainty, several trends and possibilities are expected in the field of artificial intelligence

- AI Integration: AI will become increasingly integrated into everyday life, with AI-driven technologies embedded in various devices and applications, including smartphones, appliances, vehicles, and more.
- AI in Education: AI will be used to personalize education and provide adaptive learning experiences. AI-powered tutoring systems and educational content will become more widespread.
- It's important to note that with the rapid advancement of AI, there will also be ongoing discussions and challenges related to ethics, privacy, bias, and regulation. Striking a balance between AI innovation and responsible deployment will be a key theme in shaping the future of AI. Overall, AI is expected to continue reshaping industries and societies, offering both opportunities and challenges in the years ahead.

The slide features a large blue title 'CONCLUSION :'. Below it is a bulleted list:

- In conclusion, artificial intelligence (AI) is a transformative and rapidly advancing field with profound implications for society, technology, and various industries. AI has already demonstrated its capabilities in areas such as healthcare, finance, autonomous systems, natural language understanding, and more.

The background of the slide shows a close-up of a pen writing on a graph with the number '2,47' visible.

The slide features a large blue title 'THANK YOU' at the top. Below it is the text 'BY: SAHIL SONI'.

## PRACTICAL 3

**AIM:** Use of HTML to create simple web page.

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>MY NAME IS : SAHILKUMAR SONI</h1>
<h2> I STUDY IN PARUL UNIVERSITY</h2>
<h3> MY FATHER NAME : HAreshkumar SONI</h3>
<h3> MY MOTHER NAME : PINKY SONI</h3>
<p>This is my family introduction.</p>

</body>
</html>
```

Result Size: 785 x 565   [Get your own website](#)

Activate Windows  
Go to Settings to activate Windows.

```
<html>
<head>
<style>
.city {
background-color: tomato;
color: white;
border: 2px solid black;
margin: 20px;
padding: 20px;
}
</style>
</head>
<body>

<div class="city">
<h2>London</h2>
<p>London is the capital of England.</p>
</div>

<div class="city">
<h2>Paris</h2>
<p>Paris is the capital of France.</p>
</div>

<div class="city">
<h2>Dhaka</h2>
<p>Dhaka is the capital of Bangladesh.</p>
</div>

</body>
</html>
```

Result Size: 753 x 553   [Get your own website](#)

The screenshot shows a Windows desktop environment with a web browser open to a TryIt! editor for HTML styles. The browser tabs are labeled 'HTML Styles' (three instances) and 'W3Schools Tryit Editor'. The address bar shows the URL [w3schools.com/html/trity.asp?filename=tryhtml\\_styles\\_intro](https://www.w3schools.com/html/trity.asp?filename=tryhtml_styles_intro). Below the address bar are links for Gmail, YouTube, and Maps. The main content area has a 'Run' button and a preview window titled 'Result Size: 785 x 565' with a 'Get your own website' button. The preview shows the rendered HTML code and the resulting text 'I am a software builder' in various styles. A top banner for a 'BIGGEST SALE EVER' on Xiaomi products is displayed above the preview. The taskbar at the bottom includes icons for File Explorer, Mail, Photos, Task View, Edge, and Google Chrome, along with system status icons like battery level, signal strength, and temperature (32°C). The date and time (06-10-2023, 14:04) are also shown.

The screenshot shows a Windows desktop environment with a web browser open to a TryIt! editor for HTML images. The browser tabs are labeled 'HTML Styles' (three instances), 'HTML Lists', 'HTML Links Hyper', 'HTML Images' (two instances), and 'W3Schools Tryit Editor'. The address bar shows the URL [w3schools.com/html/trity.asp?filename=tryhtml\\_images\\_trulli](https://www.w3schools.com/html/trity.asp?filename=tryhtml_images_trulli). Below the address bar are links for Gmail, YouTube, and Maps. The main content area has a 'Run' button and a preview window titled 'Result Size: 785 x 565' with a 'Get your own website' button. The preview shows the rendered HTML code and the resulting image of a person from behind. A top banner for 'THE INTERESTING CHARACTER' is displayed above the preview. The taskbar at the bottom includes icons for File Explorer, Mail, Photos, Task View, Edge, and Google Chrome, along with system status icons like battery level, signal strength, and temperature (32°C). The date and time (06-10-2023, 14:13) are also shown.

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. In the center, a browser window is open, displaying a W3Schools TryIt Editor page. The left panel of the editor shows the following HTML code:

```
<!DOCTYPE html>
<html>
<body>
<h1>HTML Links</h1>
<p><a href="https://www.getreadyforstudy.com/">Visit getreadyforstudy.com!</a></p>
</body>
</html>
```

The right panel shows the rendered output of the code, which includes a heading "HTML Links" and a link "Visit getreadyforstudy.com!". Below the preview, there is a message: "Activate Windows Go to Settings to activate Windows." The status bar at the bottom of the screen shows system information like temperature (32°C), battery level (Smoke), and date/time (14:11, 06-10-2023).

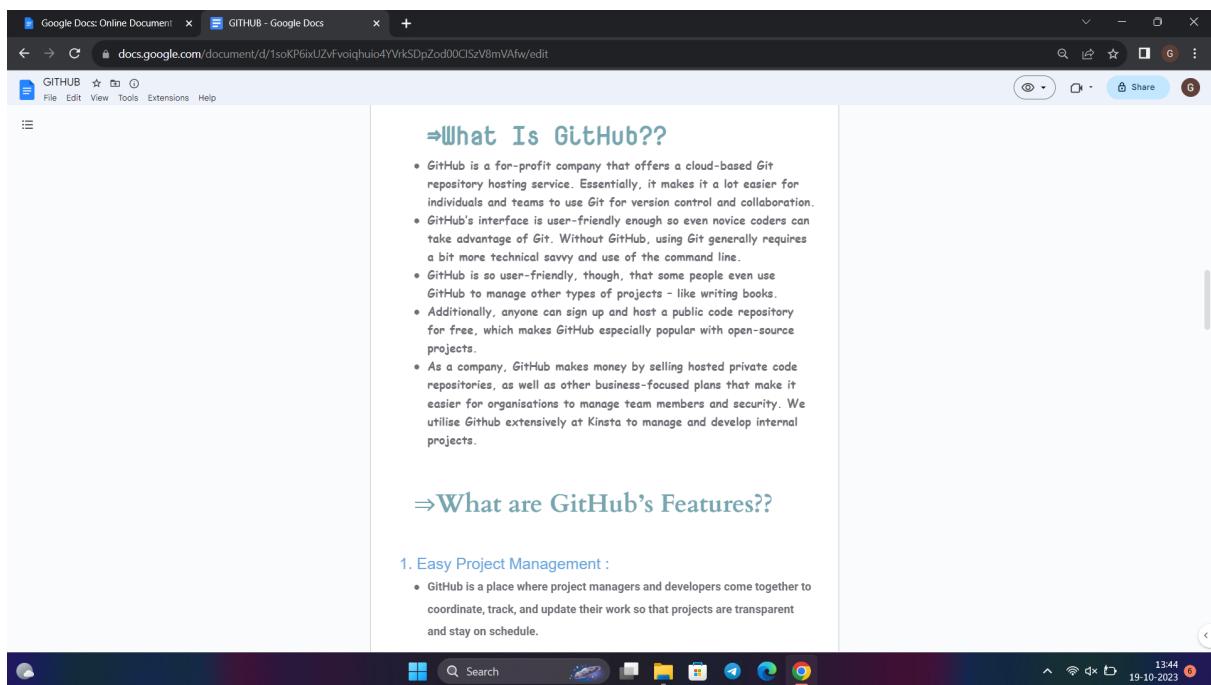
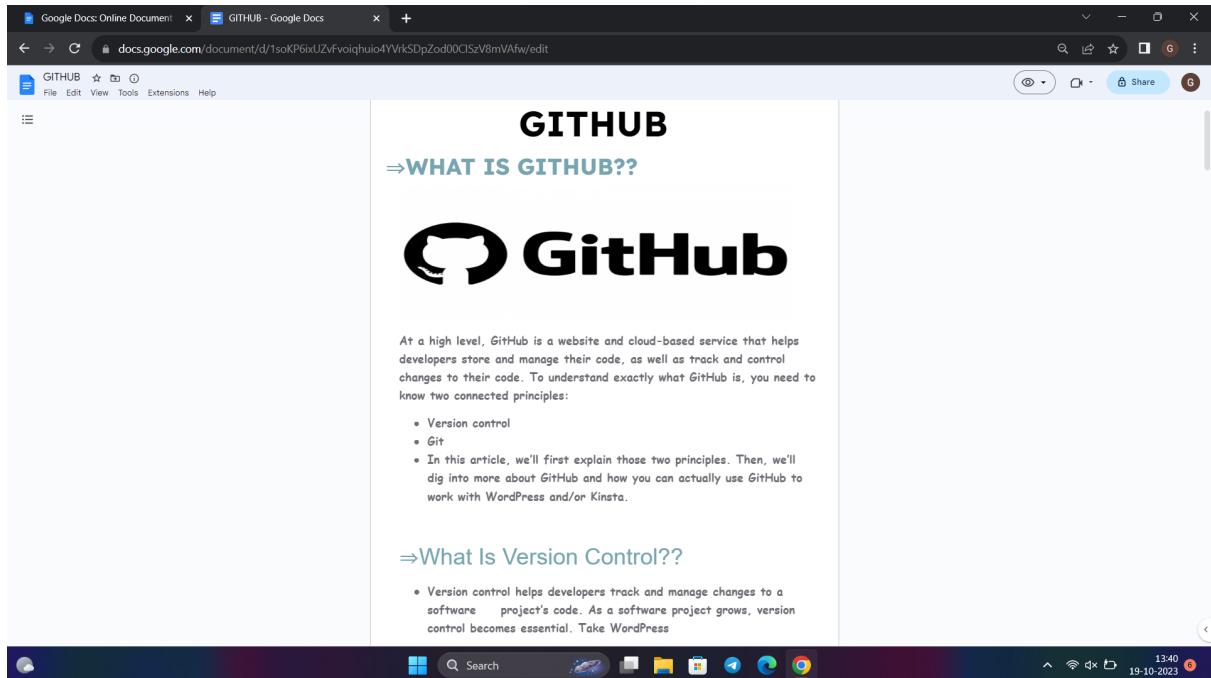
The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various icons. In the center, a browser window is open, displaying a W3Schools TryIt Editor page. The left panel of the editor shows the following HTML code:

```
<!DOCTYPE html>
<html>
<body>
<h2>LISTS OF CODING LANGUAGES IN 1ST YEAR</h2>
<ul>
<li>PYTHON</li>
<li>JAVASCRIPT</li>
<li>C</li>
</ul>
<h2>LISTS OF CODING LANGUAGES IN 2ND YEAR</h2>
<ol>
<li>JAVA</li>
<li>C++</li>
<li>C#</li>
</ol>
</body>
</html>
```

The right panel shows two sections: "LISTS OF CODING LANGUAGES IN 1ST YEAR" with a bulleted list (Python, JavaScript, C) and "LISTS OF CODING LANGUAGES IN 2ND YEAR" with an ordered list (Java, C++, C#). Below the preview, there is a message: "Activate Windows Go to Settings to activate Windows." The status bar at the bottom of the screen shows system information like temperature (32°C), battery level (Smoke), and date/time (14:08, 06-10-2023).

## PRACTICAL 4

**AIM:** Creates and Edit documents using Google Docs.



**⇒So How Do You Get Started With GitHub??**

- It's easy to get things going with GitHub. For starters, click onto the GitHub site and create an account. Then, consider installing Git on your system, especially if you plan on using your local computer. Then, go to your terminal and make yourself known to Git by setting up your user name in every repository. Use this command:  
`git config --global user.name "<your_name_here>"`

Make sure the "your name here" parameter is your own name. Pick any name you'd like.

Next, share your email address with Git. It should be the same address you entered when you joined GitHub.

`git config --global user.email "<your_email@email.com>"`

You're now ready to use Git!

**2. Increased Safety With Packages:**

- Packages can be published privately, within the team, or publicly to the open-source community. The packages can be used or reused by downloading them from GitHub.

**3. Effective Team Management:**

- GitHub helps all the team members stay on the same page and organise. Moderation tools like Issue and Pull Request Locking help the team to focus on the code.

**4. Improved Code Writing:**

- Pull requests help the organisations to review, develop, and propose new code. Team members can discuss any implementations and proposals through these before changing the source code.

**5. Increased Code Safety:**

- GitHub uses dedicated tools to identify and analyse vulnerabilities to the code that other tools tend to miss. Development teams everywhere work together to secure the software supply chain, from start to finish.

**6. Easy Code Hosting:**

- All the code and documentation are in one place. There are millions of repositories on GitHub, and each repository has its own tools to help you host and release code.

⇒ CONCLUSION:

git

• GitHub is a pivotal platform for collaborative software development, open-source projects, and developer portfolios. Its social coding features, extensive integrations, and emphasis on security make it a central tool for the global developer community.

• Git and GitHub provide fast and convenient ways to track projects, whether the project is by one individual or a team of software developers. Although GitHub has many complex features available, it's easily accessible for individual and small projects that need some kind of tracking mechanism. In addition to version control, GitHub provides users with a social platform for project management as well as the ability for users to create Gists and store GeoJson.

34°C Sunny 14:10 19-10-2023

THANK  
YOU

Let's Rebuild Better Together

DJI -0.98% 14:23 19-10-2023

## PRACTICAL 5

**AIM: Demonstration GitHub Facility.**