1. Find out and describe the purpose of IDE with respect to web development.

An Integrated Development Environment (IDE) is a software application that provides developers with a comprehensive environment to write, test, and debug code. IDEs are popular tools for web developers because they simplify the development process and help them to be more productive. Here are some purposes of IDE with respect to web development:

-> Code Editing: IDEs provide an intuitive interface for editing code. They provide syntax highlighting, autocompletion, and error highlighting, which makes it easier for developers to write accurate code.

-> Code Debugging: IDEs come with a range of debugging tools that allow developers to identify and fix code errors. They provide features like breakpoints, step-by-step execution, and a debugger console to help developers debug code quickly.

-> Integration with Other Tools: IDEs provide seamless integration with other tools, such as version control systems, build systems, and testing frameworks. This makes it easier for developers to manage their codebase and collaborate with other team members.

-> Deployment Support: IDEs support deployment to different web servers and platforms, making it easier for developers to deploy their applications with a few

clicks. -> Project Management: IDEs provide tools for managing and organizing projects. They help developers to keep track of project files, manage dependencies, and collaborate with team members.

-> Overall, the purpose of IDEs in web development is to simplify the development process, increase productivity, and make it easier for developers to create high-quality web applications.

2. Differentiate the approach of development, between static web pages with look and feel and dynamic web pages. Showcase your development environment.

Static web pages are web pages that display fixed content, and their content doesn't change unless manually edited. Static web pages are developed using HTML, CSS, and JavaScript, and are typically used for simple websites that don't require frequent updates or complex functionality. The look and feel of static web pages are determined by the HTML and CSS code used to create them.

Dynamic web pages, on the other hand, are web pages that display content that changes dynamically based on user interactions or other factors. Dynamic web pages are developed using server-side scripting languages such as PHP, Ruby, or Python, and use databases to store and retrieve data. The look and feel of dynamic

web pages are determined by the HTML and CSS code, just like static web pages, but the content is generated dynamically by the server based on user inputs and other factors.

To showcase the development environment for both static and dynamic web pages, I will use Visual Studio Code, which is a popular and powerful code editor for web development.

For static web page development, I will use HTML, CSS, and JavaScript. In Visual Studio Code, I will create a new folder for my project and create an HTML file with the basic structure, including the doctype, head, and body tags. Then, I will add CSS and JavaScript files to the project and link them to the HTML file using the appropriate tags. I can use Visual Studio Code's built-in extensions for HTML, CSS, and JavaScript to help with code highlighting, formatting, and other helpful features.

For dynamic web page development, I will use PHP and MySQL for server-side scripting and database integration. In Visual Studio Code, I will install the necessary extensions for PHP and MySQL and create a new folder for my project. I will create a PHP file with the basic structure and add code to connect to a MySQL database and retrieve data to display on the web page. I can use Visual Studio Code's built-in debugging

features to help with testing and debugging the PHP code.

Overall, the development approach for static web pages with look and feel is based on HTML, CSS, and JavaScript, while dynamic web pages use server-side scripting languages like PHP and databases like MySQL to generate and display dynamic content.

Visual Studio Code is a versatile and powerful tool that can support both types of development.

3. How do you see Error handling with respect to scripting vs programming languages? Demonstrate the same via a web page example. [Hint: Does the complete white web page mean empty body or error! May learn and relate to the blue screen of death w.r.to windows.]

In general, error handling is an essential part of both scripting and programming languages.

However, there are some differences in the way error handling is implemented in these two types of languages.

Scripting languages like JavaScript or Python often have more lenient error handling mechanisms. They usually provide easier ways to catch and handle errors, such as

try-catch blocks or error messages printed to the console. This is because scripting languages are often used for smaller tasks and are interpreted at runtime, so errors can be handled more flexibly without needing to compile the code beforehand.

On the other hand, programming languages like C++ or Java often have stricter error handling mechanisms, which can make it more challenging to write error-free code. This is because programming languages are often used for larger and more complex tasks, where even a small error can cause significant problems. In these languages, errors may need to be caught and handled in a specific way, or the code will not compile.

To demonstrate this difference, let's take the example of a web page. Suppose you are creating a web page that displays a list of items from a database. If there is an error in the database query, the page may not display correctly.

4. As a part of “Introduce yourself” development, develop a HTML web page containing a brief textual introduction about yourself. Utilize appropriate HTML tags to display the content in an organized and effective

way. This can be thought of as the textual body of your home page.

Source code

```
<!DOCTYPE html>
<html>
 <head>
 <title>Introducing myself</title>
 </head>  <body background="https://userimages.githubusercontent.com/1 24037849/219942 274-2df2d622-c11a-42c0-b6a2-5b77b90ad3d3.png"
>
  <h1><b><p style="color:green;">About Me</p></b></h1>
  <p style="color:blue;"><i>Hello! My name is  Neha patel, and I am 18 years old. I live in Bharuch, and I am currently studying in dharmsingh Desai university.</i></p>
  <p style="color:blue;"><i>I am passionate about logical thinking, and in my free time, I enjoy to read something related aboout science friction. I also love to travel</i></p>

  <h2><p style="color:green;">Contact
```

```
Me</p></h2>
   <p style="color: blue;"><i>If you would like to get in touch, feel free to email me at np1646122@gmail.com .</i></p>
  </body>
</html>
```