**WAHOME EDNA**

**1.Scratch is**

Scratch is a visual programming language developed by the MIT Media Lab to help children and beginners learn the fundamentals of coding. It uses a block-based interface where users can create programs by snapping together code blocks, making it intuitive and easy to learn.

**2. what are sprites in scratch and explain their role and usage**

Sprites are the main characters or objects in Scratch projects. They can be animated, moved, and controlled through scripts. Sprites can represent characters in a story, objects in a game, or any item that requires interaction. Users can create, customize, and program sprites to perform various actions and respond to events.

**3.How to create new project in scratch**

Log In: Go to the Scratch website (scratch.mit.edu) and log in or create an account if you don't have one.

Start a New Project: Click on the "Create" button at the top of the homepage.

Workspace: You will be taken to the Scratch editor where you can start adding sprites, scripts, and other elements to your project.

**4. What is a script in scratch**

**Define what a script is in Scratch and how it relates to sprites.**

A script in Scratch is a sequence of code blocks that are snapped together to create a set of instructions for a sprite. Scripts control the behavior of sprites, dictating actions like movements, responses to events, and interactions with other sprites or the stage.

**5. How do you move a sprite in Scratch?**

**Discuss the blocks and commands used to move a sprite in different directions.**

To move a sprite in Scratch, you use the motion blocks found in the Motion category. Common blocks include:

"move [10] steps": Moves the sprite forward by a specified number of steps.

"turn [15] degrees": Rotates the sprite by a specified number of degrees.

"go to x: [0] y: [0]": Moves the sprite to a specific position on the stage.

"glide [1] secs to x: [0] y: [0]": Smoothly moves the sprite to a specified position over a set duration.

**6. What is a 'costume' in Scratch and how is it used?**

**Explain what costumes are and how they can be applied to sprites to change their appearance**.

A costume in Scratch is a different appearance for a sprite. Sprites can have multiple costumes to change how they look. Costumes are used to animate sprites, create different states or expressions, and visually differentiate between various roles or actions in a project. You can switch between costumes using the "switch costume to [costume name]" block.

**7. What is the purpose of the 'Control' blocks in Scratch?**

**Describe the function of Control blocks and give examples of some common ones.**

Control blocks in Scratch manage the flow of scripts. They allow for repeating actions, conditional execution, and synchronization. Common Control blocks include:

"when green flag clicked": Starts the script when the green flag is clicked.

"repeat [10]": Repeats the enclosed blocks a specified number of times.

"forever": Repeats the enclosed blocks indefinitely.

"if [condition] then": Executes the enclosed blocks only if the specified condition is true.

"wait [1] seconds": Pauses the script for a specified amount of time.

**8. How can you make a sprite say something in Scratch?**

**Outline the steps or blocks needed to make a sprite display a message on the screen.**

To make a sprite say something in Scratch, use the Looks blocks:

"say [Hello!] for [2] seconds": Displays a speech bubble with the specified text for a set duration.

"say [Hello!]": Displays a speech bubble with the specified text indefinitely until another command changes it.

**9. What is the 'Stage' in Scratch?**

**Explain what the Stage is and how it interacts with sprites and scripts.**

The Stage in Scratch is the background area where sprites perform their actions and interactions. It represents the project's visible area and can have different backdrops to set the scene. Scripts can interact with the Stage by changing backdrops, positioning sprites, and responding to events like clicks.

**10. How can you share a Scratch project with others?**

**Describe the process for publishing and sharing a Scratch project on the Scratch website.**

Complete Your Project: Ensure your project is complete and saved.

Click Share: Click the "Share" button at the top of the Scratch editor.

Add Details: Fill in the title, description, and instructions for your project.

Publish: Click "Share" again to publish your project. It will now be visible to the Scratch community, and you can share the URL with others.