1.What is SEO ?

Search engine optimization (SEO) is the process of improving the quality and quantity of website traffic to a website or a web page from search engines.SEO targets unpaid traffic (known as "natural" or "organic" results) rather than direct traffic or paid traffic. Unpaid traffic may originate from different kinds of searches, including image search, video search, academic search,news search, and industry-specific vertical search engines.

As an Internet marketing strategy, SEO considers how search engines work, the computer-programmed algorithms that dictate search engine behavior, what people search for, the actual search terms or keywords typed into search engines, and which search engines are preferred by their targeted audience. SEO is performed because a website will receive more visitors from a search engine when websites rank higher on the search engine results page (SERP). These visitors can then potentially be converted into customers.

2.Meta tags usage in SEO ?

Meta tags are HTML elements that provide information about a webpage to search engines and users. Key meta tags include:

1. **Title Tag:** Essential for SEO, it should be under 60 characters, include keywords, and be compelling.
2. **Meta Description:** A summary of the page content, ideally 150-160 characters, containing keywords to encourage clicks.
3. **Meta Robots Tag:** Directs search engines on indexing (e.g., `index`, `noindex`).
4. **Viewport Tag:** Ensures responsive design on mobile devices.
5. **Charset Tag:** Defines character encoding (e.g., `UTF-8`).

Using these effectively can enhance visibility and click-through rates in search results.

3.What are semantic elements ?

Semantic elements in HTML provide meaning and context to web content, improving accessibility and SEO. Here are some key semantic elements:

1. <header>

Defines the introductory content or navigational links of a page.

2. <nav>

Represents a section of navigation links.

3. <main>

Encloses the main content of a document, excluding headers, footers, and sidebars.

4. <article>

Indicates a self-contained piece of content that could be distributed independently (e.g., blog posts, news articles).

5. <section>

Defines a thematic grouping of content, usually with a heading.

6. <aside>

Represents content indirectly related to the main content, such as sidebars or pull quotes.

7. <footer>

Contains footer information, typically including copyright, links, or authorship.

8. <figure> and <figcaption>

Used for encapsulating media content (like images) along with their captions.

9. <time>

Represents a specific period in time, useful for dates and events.

10. <address>

Provides contact information for the author or owner of a document or article.

Benefits of Using Semantic Elements:

- **Improved Accessibility:** Screen readers can better interpret the structure of content.
- **Enhanced SEO:** Search engines understand the content better, potentially improving rankings.
- **Better Maintainability:** Clearer structure makes it easier for developers to work with the code.

Using these elements helps create a more meaningful web experience for both users and search engines.