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| **Key Concepts** | **Explore concepts' significance and relevance** | **Establish relevance, make sense and meaning -Find real-life contexts** | **Establish relevance, make sense and meaning -Find interdisciplinary connections** | **Engage in critical thinking** | **Technology, tools and techniques** | **Plan**  **project management** | **Project specification and sketch** |
| The key concepts of any programming language are  -Variables  -Control Structures  -Data Structures  -Syntax  -Tools  By complexity, more elevated amount dialects, for example, "C", C++, Pascal, Cobol, Python, Fortran, ADA and Java are called "ordered dialects". In an ordered dialect, the developer composes more broad directions and a compiler (an  extraordinary bit of programming) naturally interprets these abnormal state guidelines into machine dialect. The machine dialect is then executed by the PC. | -Code controls our computerized world. Each site, cell phone application, PC program, number cruncher and even microwave depends on code with a specific end goal to work. This makes coders the draftsmen and manufacturers of the computerized age.  - We are as of now living in a world overwhelmed by programming. Your phone brings go over programming controlled systems; your TV is conveyed over the web; individuals don't purchase maps any longer, they utilize the web; we as a whole shop on the web. | - My crucial conviction is that developers are no less worried for human interests than any other person on the planet; it's only difficult to make that your principle center in life when you spend a decent segment of your day pursuing down a missing semicolon... What's more, my extraordinary trust is that in the event that we battle against the impact of our unpleasant, low-level, dreary devices and progressively supplant them with things that make us feel nearer to the result of our work, then our tech-driven industry center will move forcefully and for all time to a human-driven viewpoint.  That’s where programming meets the real  world. | -Make it matter for understudies by interfacing software engineering to different fields, for example, **medication, the humanities**, and **media.** By indicating how software engineering ideas and aptitudes are utilized as a part of different fields, you can connect with understudies who might not have considered software engineering as a noteworthy or vocation.  Rest of the connections are **using programming to realize real human DNA** **files, Stereo Sound Processing** | Programming a PC to perform complex operations is most likely all the more requesting of basic speculation abilities.  ***First,*** before one can compose a PC program to accomplish something, one must comprehend what the program should fulfill.  ***Second****,* understudies must decide, in exact detail, how the goals dictated by the past stride might be proficient.  ***Third***,  Programming dialects are translated more formally and actually than for all intents and purposes some other dialect in presence. Sentence structure and semantics are unbendingly characterized. | Various coding tools are mentioned below:  -Koding  -Codepen  -Pastebin  -Pycharm  -Pylint  -QtCreator  -QtDesigner  Coding techniques used were as follows:  -Used .editorconfig for proper indentation(python can’t work without indentation).  -Use of comments to make the code understandable for someone who is reading it for the first time.  -Naming conventions are followed. Eg. A class name always begins with a capital letter.  -Code is precise, to the point, and clean. |  | As mentioned above.  ---------do-------- |