1. **What steps does the process include ?**  
   Feature to be developed in the iteration is decided and implemented. Each iteration goes through the phases namely Requirements, Design & Development, Testing, Implementation. Detailed planning is not required in iterations.  
     
   **Which document is the output of each step?**Planning: In this phase, the project goals and objectives are defined, and the scope of the project is established. The output of this phase is a project plan or a project charter.

* Requirements gathering: In this phase, the requirements of the software product are gathered and documented. The output of this phase is a requirements specification document.
* Design: In this phase, the software design is created, and the architecture of the software product is developed. The output of this phase is a design specification document.
* Implementation: In this phase, the software product is developed and tested. The output of this phase is the software product itself.
* Testing: In this phase, the software product is tested to ensure that it meets the requirements and is free from defects. The output of this phase is a test report.
* Deployment: In this phase, the software product is released to the users. The output of this phase is the released software product.
* Maintenance: In this phase, the software product is maintained and updated as necessary to ensure that it continues to meet the requirements of the users. The output of this phase is maintenance and support documentation.

Each phase of the SDLC produces a specific document or set of documents that serve as the input for the next phase. The output of each phase is listed above. However, the exact format and content of the documents may vary depending on the specific methodology being used.

**2. Advantages and disadvantages of the Process**   
The advantages:

* Some working functionality can be developed quickly and early in the life cycle.
* Risks are identified and resolved during iteration; and each iteration is an easily managed milestone.
* Easier to manage risk - High risk part is done first.
* It supports changing requirements => Less costly to

change the scope/requirements.

* Better suited for large and mission-critical projects.
* During the life cycle, software is produced early which facilitates customer evaluation and feedback.

The disadvantages:

* More resources may be required.
* More management attention is required.
* System architecture or design issues may arise because

not all requirements are gathered in the beginning of the entire life cycle.

* Management complexity is more => Not suitable for smaller projects.
* End of project may not be known which is a risk.
* Highly skilled resources are required for risk analysis.

**3. If you were to choose a process to implement an integrated project, which process would you choose? Why?  
  
I will choose Agile process if i was to choose a process to implement an intẻgrated project, because** The agile methodology is an **incremental and iterative approach** that allows frequent changes in the project. The emphasis is mainly on flexibility and taking an adaptive approach while creating the software.

The **agile model** quickly became one of the most popular SDLC methodologies and an industry standard, sometimes even used in non-tech initiatives. The approach considers fast failure a good thing. It involves ongoing release cycles that consist of incremental changes from the previous release. Each iteration includes testing the product. The work is broken into segments called sprints. The agile model works great for projects that need flexibility and speed. Such projects are often found in startups and small organizations.