Basic:-

<https://medium.com/existek/sdlc-models-explained-agile-waterfall-v-shaped-iterative-spiral-e3f012f390c5>

**Verification**: Verification is the process of **evaluating** **products** **at** **each** **development** **phase** to find out whether they meet the **specified** requirements.

It does not involve executing the code

Verification uses **methods** like reviews, walkthroughs, inspections, and desk- checking etc.

Verification is static testing.

**Validation**: Validation is the process of **evaluating software at the end of the development process** to determine whether software meets the customer expectations and requirements.

it always involves executing the code

it uses **methods** like Black Box Testing, [White Box Testing](https://www.guru99.com/white-box-testing.html), and non-functional testing

Validation is the dynamic testing.

**QA**: providing **confidence** that quality requirements will be fulfilled

QA aims to prevent the defect

**QC**: process which **concentrates** on fulfilling the quality requirements.

QC aims to identify and fix defects

**Smoke** **testing** is done to assure that the acute functionalities of program is working fine.

Smoke testing is also called subset of acceptance testing.

**Sanity** **testing** is done to check the bugs have been fixed after the build.

Sanity testing is also called subset of regression testing.