| Imperative Programming | Declarative Programming |
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| In this, programs specify how it is to be done. | In this, programs specify what is to be done. |
| It simply describes the control flow of computation. | It simply expresses the logic of computation. |
| Its main goal is to describe how to get it or accomplish it. | Its main goal is to describe the desired result without direct dictation on how to get it. |
| Its advantages include ease to learn and read, the notional model is simple to understand, etc. | Its advantages include effective code, which can be applied by using ways, easy extension, high level of abstraction, etc. |
| Its type includes procedural programming, object-oriented programming, parallel processing approach. | Its type includes logic programming and functional programming. |
| In this, the user is allowed to make decisions and commands to the compiler. | In this, a compiler is allowed to make decisions. |
| It has many side effects and includes mutable variables as compared to declarative programming. | It has no side effects and does not include any mutable variables as compared to imperative programming. |
| It gives full control to developers that are very important in low-level programming. | It may automate repetitive flow along with simplifying code structure. |

|  | Concurrency | Parallelism |
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|  | Concurrency is the task of running and managing the multiple computations at the same time. | While parallelism is the task of running multiple computations simultaneously. |
|  | Concurrency is achieved through the interleaving operation of processes on the central processing unit(CPU) or in other words by the context switching. | While it is achieved by through multiple central processing units(CPUs). |
|  | Concurrency can be done by using a single processing unit. | While this can’t be done by using a single processing unit. it needs multiple processing units. |
|  | Concurrency increases the amount of work finished at a time. | While it improves the throughput and computational speed of the system. |
|  | Concurrency deals lot of things simultaneously. | While it do lot of things simultaneously. |
|  | Concurrency is the non-deterministic control flow approach. | While it is deterministic control flow approach. |
|  | In concurrency debugging is very hard. | While in this debugging is also hard but simple than concurrency. |