



# Types of software maintenance

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# Types of software maintenance:

1. Corrective
2. Adaptive
3. Perfective
4. Preventive

# 1. corrective maintenance:

- It is concerned with fixing errors when the software is in use.
- 20% of corrective maintenance takes part in all the maintenance activities.
- A defect can result due to errors in software design, logic and coding.
- The error produced in each case is known as residual errors.
- The need for corrective maintenance is usually initiated by bug reports drawn by the users.
- Patching: due to pressure from management the maintenance team sometimes resorts to emergency fixes

## 2. Adaptive maintenance:

- Is concerned with the change in the software that takes place to make the software adaptable to new environment (run the software on new operating system)
- The term environment refers to the conditions and the influences which act on the system
- Eg: business rules, work patterns
- Adaptive maintenance accounts for 25%





## 3. Perfective maintenance

- when changes occurred with the change in the software that occurs while adding new functionalities to increase the systems performance even when the changes have not been suggested by faults
- enhancing both the function and efficiency of the code the changing the functionalities of the system as per user changing needs
- Perfective maintenance accounts for 50% which is largest percentage in all maintenance activities.



## 4.preventive maintenance

- it involves performing activities to prevent the occurrence of error.
- It tends to reduce the software complexity.
- Improving program understandability and increasing software maintainability
- It comprises documentation updating ,code optimization and code restructuring
- It is limited to the maintenance organization only and no external requests are acquired for this maintenance
- Only 5%of all the maintenance activities