

Exercise-4

Q1. You are required to design a class hierarchy supporting the polymorphic code reuse for printing the details of a student that varies with the type of student i.e. whether he is UG, PG, PhD or some other type of student added in future. You should clearly bring out the differences among the design of class hierarchy, application code where polymorphic code reuse is supported and client code which exploits reuse supported through above design. Explain various advantages obtained through above design. Implement above design using Java/C++. (Student details for UG may be student name, roll-no, department, SPI, CPI, ..., For PG some fields like UG degree, UG institution may be added, further for PhD the name of supervisor(s) may be added.)