

GIRLS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ

PROJECT WORK

SESSION 2020-2021

CLASS 10 C, D, E, F

SUBJECT: COMPUTER APPLICATIONS

Reference Book: LOGIX Class 10 (KIPS Publications)

COMPUTER APPLICATIONS Class 10 By Sumita Arora (Dhanpat Rai & Company)

Website: w3schools.org, guideforschools.com

INSTRUCTIONS: The students are expected to write 30 programs in java. The sequence of the programs will be as follows:

1. 3 programs based on if-else.
2. 3 programs based on switch case.
3. 3 programs on looping structure(e.g.: factorial, reverse of a number, sum of the digits of number, count and display divisors, Fibonacci series, etc).
4. 4 programs on nested loop (patterns and series).
5. 4 programs on numbers (eg: prime, Armstrong, automorphic, pronic, composite, palindrome, kaprekar, etc.).
6. 2 programs on method overloading.
7. 4 programs on String (Palindrome, Piglatin, Alphabetical order of characters, extracting vowels from string, etc.).
8. 4 programs based on Single dimensional array (linear search, binary search, bubble sort, selection sort).
9. 3 programs on Double Dimensional array (sum of the elements, display left and right diagonal, display lower and upper triangle of matrix, etc.).

Instructions for writing the project

- The students are expected to execute the above programs on the computer system on BlueJ.
- Write the executed programs on interleaf punched papers.
- The programs are to be written on ruled side and the variable descriptions on the blank side.
- Format of Variable Description:

<u>Name of the variable</u>	<u>Data type</u>	<u>Purpose/Description</u>

- The project is to be written with blue pen and the headings with black pen.
- The project is to be preceded by acknowledgement and index.
- The format of index is :

S. No.	Program	Page No.	Remark

- No bibliography is required.