

Department of B. Tech First Year
Ist Sem Session 2026-27 (ODD Semester)
Assignment - 2

Subject Name: Programming Language

Subject Code: ACS 101

Date of Assignment: 15.10.2026

Date of Submission: 21.10.2026

Q.No.	Questions	Marks	CO	KL
1	Differentiate between: i). Switch case and else if ladder ii). Break and default in switch iii). Actual and formal parameters.	6	2	K3
2	In a billing system, a certain amount of discount is given. i). If total purchase less than 500 no discount. ii). If total purchase is more than 500 and less than 1000, 10% discount. iii). If total purchase is more than 1000 and less than 5000, 20% discount. iv). If total purchase is more than 5000' 30% discount. W.A.P to calculate the total bill of a customer.	3	2	K3
3	What are the differences between while and do-while loop? Explain with the help of a suitable example.	3	2	K3
4	W.A.P to design a basic calculator that takes two operands and one operator (+, -, *, /) from the user and displays the result of the operation as per the operator entered. Also explain the use of break in the switch case.	3	2	K3
5	What are the differences between call by value and call by reference? Explain with the help of an example.	5	2	K3
6	How to call, define and declare function/function prototype, explain with the help of syntax and example.	3	2	K3
7	What is a recursive function? Explain the working of recursion with the help of an example. Also explain the role of base condition in recursion.	3	2	K3

8	What will be the output of the following? Give reasons <pre>main() { int i=1; switch(i) {case1: printf("I am in case 1\n"); printf("Thank you"); case2: printf("I am in case 2\n"); printf("Thank you"); case3: printf("I am in case 3\n"); printf("Thank you"); default: printf("Invalid choice"); }</pre>	2	2	K3
8	What is the difference between break and continue? Explain in detail.	2	2	K3

Signature & Name of Faculty

HoD Signature

Date:

Date:

CO - Course Outcomes mapped with respective question

KL - Bloom's Knowledge Level (K1, K2, K3, K4, K5, K6)

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyze, **K5** – Evaluate, **K6** - Create

Note: Use a Separate copy to write the answers. Avoid copying assignments

(Approved by AICTE, Delhi & Affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow)
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