



C PROGRAMING PRATICAL

BCA BATCH 7TH

2024

Q.1) Write a C program – using gets() and puts() do display the input character .

Answer

```
#include <stdio.h>
```

```
int main() {
```

```
    char input[100]; // Buffer to hold the input string
```

```
    printf("Enter a string: ");
```

```
    gets(input); // Read input string from the user (Note: gets() is unsafe and not recommended)
```

```
    printf("You entered: ");
```

```
    puts(input); // Display the input string
```

```
    return 0;
```

```
}
```

Q.2) Write a C program to check whether the entered year is leap year or not .

Answer

```
#include <stdio.h>

int main() {
    int year;

    // Prompt the user to enter a year

    printf("Enter a year: ");

    scanf("%d", &year);

    // Check if the year is a leap year

    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0)) {

        printf("%d is a leap year.\n", year);

    }
    Else
    {

        printf("%d is not a leap year.\n", year);

    }

    return 0;
}
```

Q.3) Write a C program to check alphabet is vowel or consonant .

Answer

```
#include <stdio.h>

#include <ctype.h>

int main() {

    char ch;

    // Prompt the user to enter a character

    printf("Enter an alphabet: ");

    scanf("%c", &ch);

    // Convert the character to lowercase to make the check case-insensitive
    ch = tolower(ch);

    // Check if the character is a vowel or a consonant

    if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u') {

        printf("%c is a vowel.\n", ch);

    } else if ((ch >= 'a' && ch <= 'z')) {

        printf("%c is a consonant.\n", ch);

    } else {

        printf("%c is not an alphabet.\n", ch);

    }

    return 0;

}
```

Q.4) Write a C program USING POINTER To Swap the Values of Two Variables .

Answer

```
#include <stdio.h>

// Function to swap the values of two variables using pointers
void swap(int *a, int *b) {

    int temp;

    temp = *a; // Store the value of a in temp
    *a = *b;   // Assign the value of b to a
    *b = temp; // Assign the value of temp (original value of a) to b
}

int main() {
    int x, y;

    // Prompt the user to enter two integers

    printf("Enter two integers: ");

    scanf("%d %d", &x, &y);

    // Print the values before swapping

    printf("Before swapping: x = %d, y = %d\n", x, y);

    // Call the swap function
    swap(&x, &y);

    // Print the values after swapping
    printf("After swapping: x = %d, y = %d\n", x, y);

    return 0;
}
```

Q.5) Write a C program using structure to show the details of an employee .

Answer

```
#include <stdio.h>

// Define a structure to hold employee details
struct Employee {
    int id;
    char name[50];
    float salary;
};

int main() {
    struct Employee emp;

    // Prompt the user to enter employee details
    printf("Enter employee ID: ");
    scanf("%d", &emp.id);

    printf("Enter employee name: ");
    scanf("%s", emp.name);

    printf("Enter employee salary: ");
    scanf("%f", &emp.salary);

    // Display the employee details
    printf("\nEmployee Details:\n");
    printf("ID: %d\n", emp.id);
    printf("Name: %s\n", emp.name);
    printf("Salary: %.2f\n", emp.salary);

    return 0;
}
```