

Assignment 2



Shri G.S Institute of Technology & Science

C Programming Lab

Assignment 2 – INDEX

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P1. Write a C program to print day of week name using switch case

```
#include<stdio.h>

void main(){
    int n;

    printf("SHIV ARORA\n");
    printf("Enter a number for Day \n");
    scanf("%d", &n);
    switch(n){
        case 1:
            printf("Sunday\n");
            break;
        case 2:
            printf("Monday\n");
            break;
        case 3:
            printf("Tuesday\n");
            break;
        case 4:
            printf("Wednesday\n");
            break;
        case 5:
            printf("Thrusday\n");
            break;
        case 6:
            printf("Friday\n");
            break;
        case 7:
            printf("Saturday\n");
            break;
    }
}
```

OUTPUT:

SHIV ARORA

Enter a number for Day

3

Tuesday

P2. Write a C program print total number of days in a month using switch case.

```
#include<stdio.h>

void main(){
    int n;

    printf("SHIV ARORA\n");
    printf("Enter a number for Month  \n");
    scanf("%d", &n);
    switch(n){
        case 1:
            printf("There are 31 days in Jan\n");
            break;
        case 2:
            printf("There are 28/29 days in Feb\n");
            break;
        case 3:
            printf("There are 31 days in Mar\n");
            break;
        case 4:
            printf("There are 30 days in Apr\n");
            break;
        case 5:
            printf("There are 31 days in May\n");
            break;
        case 6:
            printf("There are 30 days in Jun\n");
            break;
        case 7:
            printf("There are 31 days in Jul\n");
            break;
        case 8:
            printf("There are 31 days in Aug\n");
```

```

        break;
    case 9:
        printf("There are 30 days in Sep\n");
        break;
    case 10:
        printf("There are 31 days in Oct\n");
        break;
    case 11:
        printf("There are 30 days in Nov\n");
        break;
    case 12:
        printf("There are 31 days in Dec\n");
        break;
    }
}

```

OUTPUT:

```

SHIV ARORA
Enter a number for Month
7
There are 31 days in Jul

```

P3. Write a C program to check whether an alphabet is vowel or consonant using switch case.

```

#include<stdio.h>

void main(){
    char ch;

    printf("SHIV ARORA\n");
    printf("Enter an alphabet \n");
    scanf("%c", &ch);
    switch(ch){
        case 'a':
            printf("The alphabet is a vowel\n");
            break;
        case 'e':
            printf("The alphabet is a vowel\n");

```

```

        break;
        case 'i':
        printf("The alphabet is a vowel\n");
        break;
        case 'o':
        printf("The alphabet is a vowel\n");
        break;
        case 'u':
        printf("The alphabet is a vowel\n");
        break;
        default:
        printf("The alphabet is a consonant\n");
        break;
    }
}

```

OUTPUT:

SHIV ARORA

Enter an alphabet

y

The alphabet is a consonant

P4. Write a C program to find maximum between two numbers using switch case.

```

#include<stdio.h>

void main(){
    int a, b;

    printf("SHIV ARORA\n");
    printf("Enter two numbers \n");
    scanf("%d%d", &a, &b);
    switch(a > b){
        case 0:
            printf("%d is the maximum number\n", b);
            break;
        case 1:
            printf("%d is the maximum number\n", a);

```

```

        break;
    }
}

```

OUTPUT:

```

SHIV ARORA
Enter two numbers
12 78
78 is the maximum number

```

P5. Write a C program to check whether a number is even or odd using switch case.

```

#include<stdio.h>

void main(){
    int a;

    printf("SHIV ARORA\n");
    printf("Enter a numbers \n");
    scanf("%d", &a);
    switch(a%2 == 0){
        case 0:
            printf("%d is odd\n", a);
            break;
        case 1:
            printf("%d is even\n", a);
            break;
    }
}

```

OUTPUT:

```

SHIV ARORA
Enter a numbers
35
35 is odd

```

P6. Write a C program to check whether a number is positive, negative or zero using switch case.

```

#include<stdio.h>

void main(){

```

```

int a;

printf("SHIV ARORA\n");
printf("Enter a numbers \n");
scanf("%d", &a);
switch(a > 0){
    case 1:
        printf("%d is positive\n", a);
        break;
    case 0:
        switch(a < 0){
            case 1:
                printf("%d is negative\n", a);
                break;
            case 0:
                printf("%d is zero\n", a);
                break;
        }
    }
}

```

OUTPUT:

```

SHIV ARORA
Enter a numbers
-98
-98 is negative

```

P7. Write a C program to find roots of a quadratic equation using switch case.

```

#include <stdio.h>
#include <math.h>
int main() {
    float a, b, c, dis, r1, r2;
    printf("SHIV ARORA\n");
    printf("Enter three numbers \n");
    scanf("%f %f %f", &a, &b, &c);
    dis = b * b - 4 * a * c;

```



```

switch ((dis > 0) * 1) {
    case 1:
        r1 = (-b + sqrt(dis)) / (2 * a);
        r2 = (-b - sqrt(dis)) / (2 * a);
        printf("Root 1 = %.2f\n", r1);
        printf("Root 2 = %.2f\n", r2);
        break;
    case 0:
        if (dis == 0) {
            r1 = r2 = -b / (2 * a);
            printf("Root 1 = Root 2 = %.2f\n", r1);
        }
        break;
}

if (dis < 0) printf("No real roots exist\n");
return 0;
}

```

OUTPUT:

Enter three numbers

4 -9 -2

Root 1 = 2.45

Root 2 = -0.20

P8. Write a C program to create Simple Calculator using switch case.

```

#include <stdio.h>

int main() {
    char op;
    float n1, n2, result;
    printf("SHIV ARORA\n");
    printf("Enter two numbers: \n");
    scanf("%f %f", &n1, &n2);
    printf("Enter the operator\n");
    scanf(" %c", &op);
    switch (op) {

```

```
    case '+':  
        printf("%.2f\n", n1 + n2);  
        break;  
    case '-':  
        printf("%.2f\n", n1 - n2);  
        break;  
    case '*':  
        printf("%.2f\n", n1 * n2);  
        break;  
    case '/':  
        printf("%.2f\n", n1 / n2);  
        break;  
    }  
    return 0;  
}
```

OUTPUT:

SHIV ARORA

Enter two numbers:

14 78

Enter the operator

+

92.00