C assignments – Day 6 (1-Sept-2022)

Name – Shreyas Raju Awankar

Que1 – Write a program to read a number from user & display the sum of its digits.

```c
#include <stdio.h>
void main(){
    int sum = 0, a, b;
    printf("Enter your number: ");
    scanf("%d", &a);
    while (a!=0){
        b = a%10;
        a = a/10;
        sum += b;
    }
    printf("The sum digits of the entered number is: %d", sum);
}
```

Que2 – Write a program to read a number from user & display the multiplications of its digits.

```c
#include <stdio.h>
void main(){
    int mult = 1, a, b;
    printf("Enter your number: ");
    scanf("%d", &a);
    while (a!=0){
        b = a%10;
        a = a/10;
        mult *= b;
    }
    printf("The multiplication of the digits of the number you entered is: %d",
mult);
}
```

Que3- Write a program to read a number from user and add the square of its all digits.

```c
#include <stdio.h>
void main(){
    int sum = 0, a, b;
    printf("Enter your number: ");
    scanf("%d", &a);
    while (a!=0){
        b = a%10;
        a = a/10;
        sum += b*b;
    }
    printf("The sum square of digits of the entered number is: %d", sum);
}
```

Que4- Write a program to read a number from user and perform multiplication of cube of its every digit.

```c
#include <stdio.h>
void main()
{
    int mult = 1, a, b;
    printf("Enter your number: ");
    scanf("%d", &a);
    while (a != 0)
    {
        b = a % 10;
        a = a / 10;
        mult *= b * b * b;
    }
    printf("The multiplication of cubes of the digits of the number you entered
is: %d", mult);
}
```

Que5- Write a program to swap two numbers with three variables.

```c
#include <stdio.h>
void main(){
    int a,b,c;
    printf("Enter two numbers:\n");
    scanf("%d%d", &a,&b);
    c=a;
    a=b;
    b=c;
    printf("Swapped numbers are a = %d and b = %d", a,b);
}
```

Que6 - Write a program to swap two numbers without third variable.

```c
#include <stdio.h>
void main(){
    int a,b;
    printf("Enter two numbers:\n");
    scanf("%d%d", &a,&b);
    a = a+b; //5+7=12
    b = a-b; //12-7=5
    a = a-b; //12-5=7
    printf("Swapped numbers are a = %d and b = %d", a,b);
}
```

Que7- Run operator precedence statements on machine.

```c
#include <stdio.h>
void main(){
    int a = (5>2&&3>7);
    printf("%d\n",a);

    a =(9>2!=5<3!=7);
    printf("%d\n",a);

    a = !5;
    printf("%d\n",a);

    a= (27 != 28);
    printf("%d\n",a);

    a = (18>35 || 9 != 3 && (7==(49/7)));
    printf("%d\n",a);
```

```c
    a=(12*2+5*2-1*9/3);
    printf("%d\n",a);
}
```