

# C assignments – Day 15 (15-Sept-2022)

Name – Shreyas Raju Awankar

Que1 – Write a program to read two numbers from user and read choice if choice 1 then add two numbers

If choice 2, the subtract them

If choice 3, then multiply them

If choice 4, divide them

If choice 5, find their modulus.

Otherwise display wrong choice.

```
#include <stdio.h>
void main()
{
    int a, b, choice;
    printf("Enter your numbers\n");
    scanf("%d%d", &a, &b);
    printf("Please enter the choice\n");
    scanf("%d", &choice);
    switch (choice)
    {
        case 1:
            printf("The addition is %d", a + b);
            break;
        case 2:
            printf("The substration is %d", a - b);
            break;
        case 3:
            printf("The multiplication is %d", a * b);
            break;
        case 4:
            printf("The division is %d", a / b);
            break;
        case 5:
            printf("The modulus is %d", a % b);
            break;
        default:
            printf("Wrong choice");
    }
}
```

Que2- Write a program to read two numbers from user and read choice.

If choice 1, print all the numbers between these two numbers in ascending order

If choice 2, print all the numbers in descending order

If choice 3, print all the numbers in interval of two.

If choice 4, print all the numbers in interval of 3

Otherwise print "Wrong choice" using for loop while loop and do-while loop.

With for

```
#include <stdio.h>
void main()
{
    int a, b, choice;
    printf("Enter two numbers\n");
    scanf("%d%d", &a, &b);
    printf("Enter your choice\n");
    scanf("%d", &choice);

    switch (choice)
    {
        case 1:
            if (a > b)
            {
                for (b; a >= b; b++)
                {
                    printf("%d\t", b);
                }
            }
            else
            {
                for (a; b >= a; a++)
                {
                    printf("%d\t", a);
                }
                break;
            }

        case 2:
            if (a > b)
            {
                for (a; a >= b; a--)
```

```
        {
            printf("%d\t", a);
        }
    }
    else
    {
        for (b; b >= a; b--)
        {
            printf("%d\t", b);
        }
    }
    break;

case 3:
    if (a > b)
    {
        for (b; a >= b; b += 2)
        {
            printf("%d\t", b);
        }
    }
    else
    {
        for (a; b >= a; a += 2)
        {
            printf("%d\t", a);
        }
    }
    break;

case 4:
    if (a > b)
    {
        for (b; a >= b; b += 3)
        {
            printf("%d\t", b);
        }
    }
    else
    {
        for (a; b >= a; a += 3)
        {
            printf("%d\t", a);
        }
    }
}
```

```

        break;

default:
    printf("Wrong choice.");
}
}

```

With do-while

```

#include <stdio.h>
void main()
{
    int a, b, choice;
    printf("Enter two numbers\n");
    scanf("%d%d", &a, &b);
    printf("Enter your choice\n");
    scanf("%d", &choice);

    switch (choice)
    {
        case 1:
            if (a > b)
            {
                do
                {
                    printf("%d\t", b);
                    b++;
                } while (a >= b);
            }
            else
            {
                do
                {
                    printf("%d\t", a);
                    a++;
                } while (b >= a);
                break;
            }

        case 2:
            if (a > b)
            {
                do
                {
                    printf("%d\t", a);

```

```
        a--;  
    } while (a >= b);  
}  
else  
{  
    do  
    {  
        printf("%d\t", b);  
        b--;  
    } while (b >= a);  
}  
break;  
  
case 3:  
    if (a > b)  
    {  
        do  
        {  
            printf("%d\t", b);  
            b += 2;  
        } while (a >= b);  
    }  
    else  
    {  
        do  
        {  
            printf("%d\t", a);  
            a += 2;  
        } while (b >= a);  
    }  
    break;  
  
case 4:  
    if (a > b)  
    {  
        do  
        {  
            printf("%d\t", b);  
            b += 3;  
        } while (a >= b);  
    }  
    else  
    {  
        do  
        {  

```

```

        printf("%d\t", a);
        a += 3;
    } while (b >= a);
}
break;

default:
    printf("Wrong choice.");
}
}

```

With while

```

#include <stdio.h>
void main()
{
    int a, b, choice;
    printf("Enter two numbers\n");
    scanf("%d%d", &a, &b);
    printf("Enter your choice\n");
    scanf("%d", &choice);

    switch (choice)
    {
        case 1:
            if (a > b)
            {
                while (a >= b)
                {
                    printf("%d\t", b);
                    b++;
                }
            }
            else
            {
                while (b >= a)
                {
                    printf("%d\t", a);
                    a++;
                }
                break;
            }

        case 2:
            if (a > b)

```

```

    {
        while (a >= b)
        {
            printf("%d\t", a);
            a--;
        }
    }
    else
    {
        while (b >= a)
        {
            printf("%d\t", b);
            b--;
        }
    }
    break;

case 3:
    if (a > b)
    {
        while (a >= b)
        {
            printf("%d\t", b);
            b += 2;
        }
    }
    else
    {
        while (b >= a)
        {
            printf("%d\t", a);
            a += 2;
        }
    }
    break;

case 4:
    if (a > b)
    {
        while (a >= b)
        {
            printf("%d\t", b);
            b += 3;
        }
    }
}

```

```
    else
    {
        while (b >= a)
        {
            printf("%d\t", a);
            a += 3;
        }
    }
    break;

default:
    printf("Wrong choice.");
}
}
```