

Practice While Loop 1 (Date: 01-06-2021)

Write program for following descriptions, first three are solved for your understanding:

- a. Write a program to print numbers 1 to 20 in single line?

```
int main(){
    int c = 1;
    while (c <= 20){
        printf ("%d ", c);
        c = c + 1;
    }
    printf ("\n");//After printing 1 to 20 move to next line
    return 0;
}
```

- b. Write a program to print numbers 1 to 5 in separate lines?

```
int main(){
    int t = 1;
    while (t <= 5){
        printf ("%d\n", t);
        t = t + 1;
    }
    return 0;?
}
```

- c. Write a program to print numbers 10 to 20 in single line and 20 to 10 in single line?

```
int main(){
    int count = 10;
    while (count <= 20){
        printf ("%d ", count);
        count = count + 1;
    }
    printf ("\n");//Move to next line
    count = 20;//Initialize variable to start with 20
    while (count >= 10){
        printf ("%d ", count);
        count = count - 1;
    }
    printf ("\n");
    return 0;
}
```

- d. Write a program to print numbers -1 to -20 in a single line?

- e. Write a program to print following output, using while loop:

```
11 21
12 22
13 23
14 24
15 25
```

Hint: You may do it with single variable, in print statement use %d two times and print x+10 **or** use two variables, initialize one variable with 11, second with 21, increment both by 1; however; condition can be placed on any variable (No need to put condition on both variables)

- f. Write a program to print following output, using while loop:

```
11 25
12 24
13 23
14 22
15 21
```

Hint: Use two variables, initialize one variable with 11, second with 25, increment first by 1, decrement second by 1; again condition on first variable is sufficient.

- g. Write a program to print following output, using while loop:

```
*****
```

Hint: Same as first program but instead of printing number, print star i.e.

```
printf("*");
```

- h. Write a program to print following output, using while loop:

```
*
*
*
*
*
*
*
*
*
*
```

Hint: Same as second program but instead of printing number, print star i.e.

```
printf("*\n");
```

- i. Write a program to print following output, using while loop:

```
*****
```

Hint: Same as first program but instead of printing number, print star i.e.

```
printf("*");
```