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1. The difference between while, do-while, and for loop is :

- In the while statement, first a counter is initialized which undergoes a test condition. If the condition evaluates to true, then the body of the loop gets executed. Hence, while loop runs until the condition becomes false so there is a possibilities for infinite loop to be occure.
- In the do-while statement, first the instructions in the do block are executed and then the condition in the while block is tested. So, the do while statement will at least execute the code once, even if the condition is false at the very first time.
- The for loop is the most used repetition statement in almost all programming languages. The reason for its popularity is that it does three jobs at once. It initializes the counter, tests the condition and increments/decrements the counter at the same time.

**References:**

- <https://www.tutorialspoint.com/do-while-loop-vs-while-loop-in-c-cplusplus>

2. A switch statement allows a variable to be tested for equality against a list of values. Each value is called a case, and the variable being switched on is checked for each switch case.

- If there is a match, the corresponding statements after the matching label are executed.
- If there is no match, the default statements are executed.
- Finally, the break statement terminates the switch statement.

**References:**

- <https://www.geeksforgeeks.org/switch-statement-cc/>

3. Both “break” and “continue” are the ‘jump’ statements, that transfer control of the program to another part of the program. Break have a task to terminates the execution of remaining iteration of the loop. While continue terminates only the current iteration of the loop.

The main difference between break and continue is that break is used for immediate termination of loop. On the other hand, ‘continue’ terminate the current iteration and resumes the control to the next iteration of the loop.

**References:**



- <https://techdifferences.com/difference-between-break-and-continue.html>

4. #include<stdio.h>

```
int stars;

int main(){

    printf("How many * do you want ? : ");

    scanf("%d", &stars);

    for(int i=1 ; i <= stars; i++){

        printf("*");

    }

}
```

```
C:\Users\LEO\Documents\4.ELEKTRO\Baskom\Lab\Tugas\CS3.exe
How many * do you want ? : 5
*****
-----
Process exited after 4.076 seconds with return value 0
Press any key to continue . . .
```

5. #include<stdio.h>

```
int num;

int main(){

    printf("Input number : ");

    scanf("%c",&num);

    switch(num){

        case 0 :

            printf("zero \n");

            break;

        case -1 :

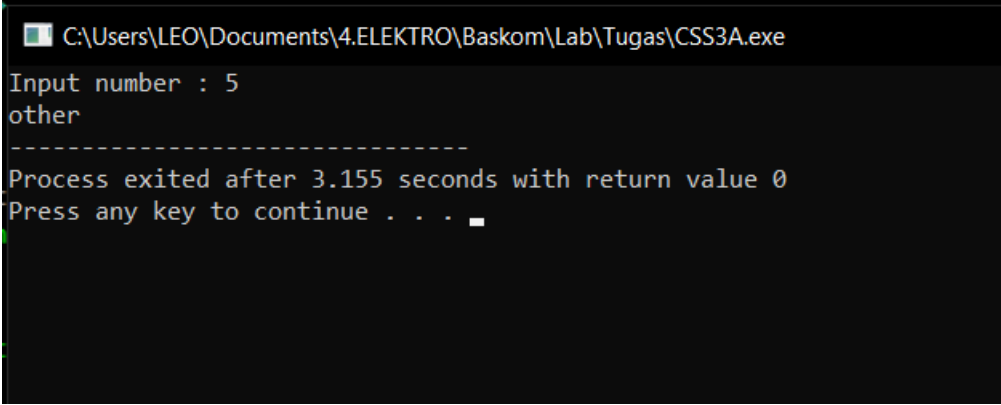
            printf("minus one \n");

            break;

        case 1 :
```



```
        printf("one \n");  
    break;  
    default :  
        printf("other");  
    break;  
}  
}
```



```
C:\Users\LEO\Documents\4.ELEKTRO\Baskom\Lab\Tugas\CSS3A.exe  
Input number : 5  
other  
-----  
Process exited after 3.155 seconds with return value 0  
Press any key to continue . . .
```