

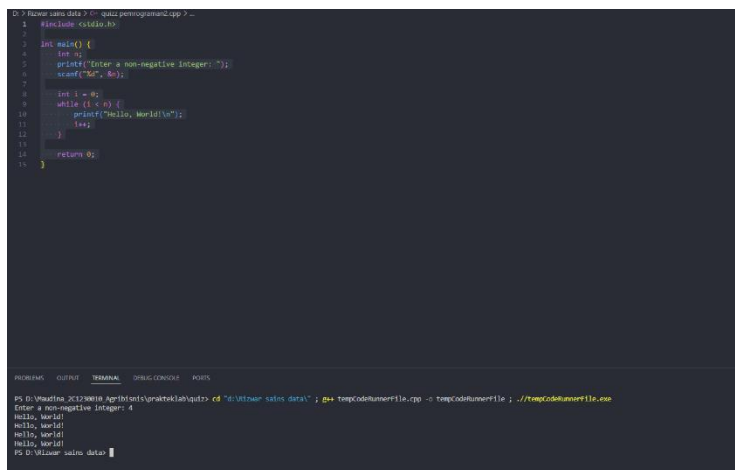
Nama: Rizwar Syaefulloh

Nrp : 2C2230009

Kelas : Sains Data

1. Tuliskan sebuah program yang mengeluarkan "Hello, World!" sebanyak n kali (di mana n adalah sebuah bilangan bulat non-negatif yang akan dimasukkan oleh pengguna) dengan:
 - a. For loop
 - b. While loop
 - c. Do while loop

A. For Loop



```
1 #include <iostream.h>
2
3 int main() {
4     int n;
5     printf("Enter a non-negative integer: ");
6     scanf("%d", &n);
7
8     for (int i = 0; i < n; i++) {
9         printf("Hello, World!\n");
10    }
11
12    return 0;
13 }
```

PROGRAM OUTPUT TERMINAL DEBUG-CONSOLE PORTS

```
PS D:\Maslisa 2022\W18A\Agribisnis\praktiklab\qutr> cd "D:\Maslisa sains data\" & g++ tempcodetunmerfile.cpp -o tempcodetunmerfile.exe
Enter a non-negative integer: 4
Hello, World!
Hello, World!
Hello, World!
Hello, World!
PS D:\Maslisa sains data\
```

B. While Loop

```
D:\> g++ main.cpp -o main.exe
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("Enter a non-negative integer: ");
6     scanf("%d", &n);
7
8     for (int i = 0; i < n; i++) {
9         printf("Hello, World!\n");
10    }
11
12    return 0;
13 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS

tempCodeRunnerFile.cpp: In function 'int main()':
tempCodeRunnerFile.cpp:12:14: warning: 'scanf' at end of input
12 | return 0;
 | ^~~~~~
tempCodeRunnerFile.cpp:12:12: note: to match this '['
9 | int main() {
10 | int n;
11 | printf("Enter a non-negative integer: ");
12 | scanf("%d", &n);
13 |
14 | for (int i = 0; i < n; i++) {
15 | printf("Hello, World!\n");
16 | }
17 |
18 | return 0;
19 | }

Enter a non-negative integer: 3
Hello, World!
Hello, World!
Hello, World!
PS D:\Vidwan\main data>

C. Do-While Loop

```
1 #include <stdio.h>
2
3 int main() {
4     int n;
5     printf("Enter a non-negative integer: ");
6     scanf("%d", &n);
7
8     int i = 0;
9     do {
10         printf("Hello, World!\n");
11         i++;
12     } while (i < n);
13
14     return 0;
15 }
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE PORTS

PS D:\Vidwan_20220819_Agrithonia\praktiklab\quiz> cd "d:\Vidwan\main data" ; g++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile.exe
Enter a non-negative integer: 5
Hello, World!
Hello, World!
Hello, World!
Hello, World!
Hello, World!
PS D:\Vidwan\main data>

2. Tuliskan keluaran (apa yang tercetak di layar) dari program-program di bawah ini pada kotak kosong di samping kanan program. Jika tidak ada keluaran, tuliskan: Tidak ada keluaran. Program-program di bawah ini sudah dipastikan lolos kompilasi

A.

```
D:\> Rizwar sains data > C++ 1.cpp > ...
1 #include <iostream>
2 using namespace std;
3 int main() {
4     int N;
5     N = 100;
6     if (N % 10 == 0) {
7         cout << "xxx" << endl;
8         if (N / 5 == 0) {
9             cout << "aaa" << endl;
10        }
11        if (N % 11 == 1) {
12            cout << "bbb" << endl;
13        }
14    } else {
15        cout << "yyy" << endl;
16        if (N / 2 == 0) {
17            cout << "ccc" << endl;
18        }
19        if (N % 3 == 1) {
20            cout << "ddd" << endl;
21        }
22    }
23    return 0;
24 }
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE PORTS

```
PS D:\Vaudina_2C1230010_Agribisnis\prakteklab\quiz> cd "d:\Rizwar sains data\" ; g++ tempCodeRunnerfile.cpp -o tempCodeRunnerfile ; ./tempCodeRunnerfile.exe
xxx
bbb
PS D:\Rizwar sains data> |
```

B.

```
1 #include <iostream>
2 using namespace std;
3 int main() {
4     const int genap = 2;
5     int i;
6     int found;
7     int Tabint[10];
8     for(i = 0, i < 10, i++)
9     {
10         Tabint[i] = i * genap;
11     }
12     i = 10; found = 0;
13     while ((i > 0) && (!found)) {
14         if (Tabint[i] % 6 == 0)
15             found = 1;
16         else
17             i = i - 1;
18     }
19     if (found)
20         cout << i << endl;
21     else
22         cout << "Tidak ditemukan" << endl;
23     return 0;
24 }
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE PORTS

```
PS D:\Vaudina_2C1230010_Agribisnis\prakteklab\quiz> cd "d:\Rizwar sains data\" ; g++ tempCodeRunnerfile.cpp -o tempCodeRunnerfile ; ./tempCodeRunnerfile.exe
0
PS D:\Rizwar sains data>
```

C.

```
D:\> Rinzar\sains\data > C++ 3.cpp > ...
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     string letters[2][4] = {
6         { "A", "B", "C", "D" },
7         { "E", "F", "G", "H" }
8     };
9
10    cout << letters[0][2];
11    return 0;
12 }
13
14 |
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE PORTS

PS D:\Masding_K1238856_Aplikasi\praktik\lab\qidi> cd "d:\Rinzar\sains\data\" ; g++ 3.cpp -o 3 ; ./3.exe
C
PS D:\Rinzar\sains\data>

3. Buatlah fungsi IsVokal yang

- mempunyai parameter input sebuah character huruf kecil ‘a’ s.d. ‘z’
- menghasilkan true jika character tersebut adalah vokal (‘a’, ‘i’, ‘u’, ‘e’, ‘o’)

```
D:\> Rinzar\sains\data > C++ 1212.cpp > ...
5 int main() {
10     if (IsVokal(c)) {
11         std::cout << c << " adalah vokal." << std::endl;
12     } else {
13         std::cout << c << " bukan vokal." << std::endl;
14     }
15
16     return 0;
17 }
18
19 bool IsVokal(char c) {
20     switch (c) {
21         case 'a':
22         case 'i':
23         case 'u':
24         case 'e':
25         case 'o':
26             return true;
27         default:
28             return false;
29     }
30 }
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE PORTS

./tempCodeRunnerFile.exe : The term './tempCodeRunnerFile.exe' is not recognized as the name of a cmdlet, function, script file, or operable program. Check the spelling of the name, or if a path was included, verify that the path is correct and try again.
At line:1 char:81
+ ... pCodeRunnerFile.cpp -o tempCodeRunnerFile ; ./tempCodeRunnerFile.exe
+ ~~~~~
+ CategoryInfo : ObjectNotFound: (./tempCodeRunnerFile.exe:String) [], CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException

PS D:\Rinzar\sains\data> cd "d:\Rinzar\sains\data\" ; g++ tempCodeRunnerFile.cpp -o tempCodeRunnerFile ; ./tempCodeRunnerFile.exe
Masukkan sebuah huruf kecil: b
b bukan vokal.
PS D:\Rinzar\sains\data> |

4. Lengkapi bagian dari program berikut:

a. Membuat larik tipe `string` bernama `cars`

```
... `` ... [4] = {"Volvo", "BMW", "Ford", "Mazda"};
```

Jawab: `string cars[4] = {"volvo", "BMW", "Ford", "Mazda", };`

b. Buat variabel *pointer* dengan nama `ptr`, yang harus menunjuk ke variabel `string` bernama `food`:

Jawab: `string food = "pizza";`

```
String*ptr = $food;
```