

Nama : Ariela Safmi Ramdhani

NRP : 2C2230005

MK : Pemrograman Dasar

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

```
#include <iostream>

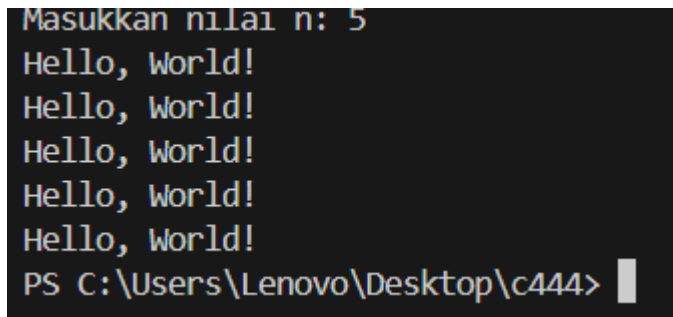
int main() {
    int n;

    std::cout << "Masukkan nilai n: ";
    std::cin >> n;

    for (int i = 0; i < n; ++i) {
        std::cout << "Hello, World!" << std::endl;
    }

    return 0;
}
```

OUTPUT



```
Masukkan nilai n: 5
Hello, World!
Hello, World!
Hello, World!
Hello, World!
Hello, World!
PS C:\Users\Lenovo\Desktop\c444>
```

b. While loop

```
#include <iostream>

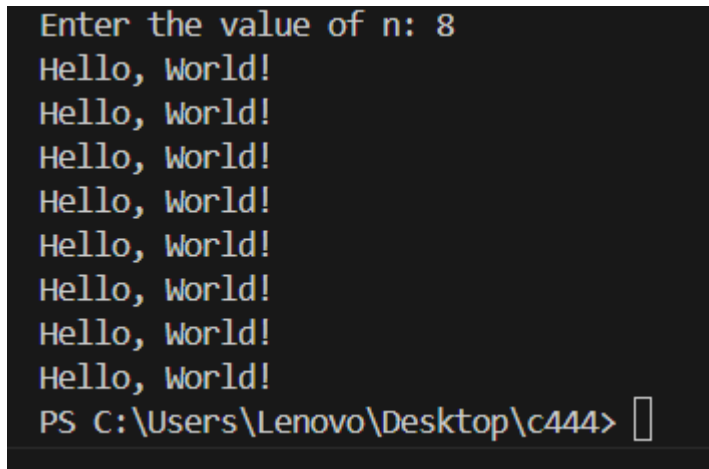
int main() {
    int n;

    std::cout << "Masukkan nilai n: ";
    std::cin >> n;

    int i = 0;
    while (i < n) {
        std::cout << "Hello, World!" << std::endl;
        i++;
    }
}
```

```
    return 0;
}
```

OUTPUT



```
Enter the value of n: 8
Hello, World!
Hello, World!
Hello, World!
Hello, World!
Hello, World!
Hello, World!
Hello, World!
Hello, World!
PS C:\Users\Lenovo\Desktop\c444>
```

c. Do while loop

```
#include <iostream>
```

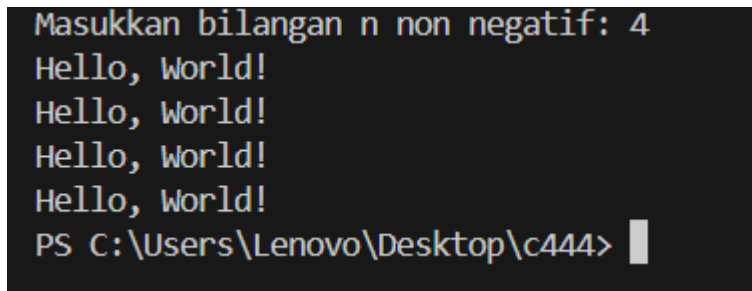
```
int main() {
    int n;

    std::cout << "Masukkan bilangan n non negatif: ";
    std::cin >> n;

    int i = 0;
    do {
        std::cout << "Hello, World!" << std::endl;
        i++;
    } while (i < n);

    return 0;
}
```

OUTPUT



```
Masukkan bilangan n non negatif: 4
Hello, World!
Hello, World!
Hello, World!
Hello, World!
PS C:\Users\Lenovo\Desktop\c444>
```

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.

```

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

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Lenovo\Desktop\c444> & 'c:\Users\Lenovo\.vscode\extensions\ms-vscode.cpptools-1.20.2-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-hbo5skyw.nfi' '--stdout=Microsoft-MIEngine-Out-kk1me43l.ymt' '--stderr=Microsoft-MIEngine-Error-td2lubmv.nri' '--pid=Microsoft-MIEngine-Pid-bmo20ho1.akk' '--dbgExe=C:\mingw64\bin\gdb.exe' '--interpreter=mi'
xxx
bbb
PS C:\Users\Lenovo\Desktop\c444>

```

```

2.2.cpp > main()
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     }
17     i = i - 1;
18 }
19 if (found)
20     cout << i << endl;
21 else
22     cout << "Tidak ditemukan" << endl;
23     return 0;

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Lenovo\Desktop\c444> & 'c:\Users\Lenovo\.vscode\extensions\ms-vscode.cpptools-1.20.2-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-c55\crzi.sce' '--stdout=Microsoft-MIEngine-Out-aqt4pryr.y15' '--stderr=Microsoft-MIEngine-Error-2awpyoko.vty' '--pid=Microsoft-MIEngine-Pid-zdm1lw4h.a8r' '--dbgExe=C:\mingw64\bin\gdb.exe' '--interpreter=mi'
9
PS C:\Users\Lenovo\Desktop\c444>

```

```

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 DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Lenovo\Desktop\c444> & 'c:\Users\Lenovo\.vscode\extensions\ms-vscode.cpptools-1.20.2-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe' '--stdin
Microsoft-MIEngine-In-3aduf54.kmz' '--stdout=Microsoft-MIEngine-Out-frtne2y0.qqv' '--stderr=Microsoft-MIEngine-Error-tptufnp.11k' '--pid=Microsoft-MIEngine-P
id-t0cahaq.lrs' '--dbgExe=c:\mingw64\bin\gdb.exe' '--interpreter=mi'
C
PS C:\Users\Lenovo\Desktop\c444>

```

3. Buatlah fungsi IsVokal yang

a. mempunyai parameter input sebuah character huruf kecil 'a' s.d. 'z'

```

1 bool IsVokal(char input) {
2     return input == 'a' || input == 'e' || input == 'i' || input == 'o' || input == 'u';
3 }
4

```

b. menghasilkan true jika character tersebut adalah vokal ('a', 'i', 'u', 'e', 'o')

```

1 #include <iostream>
2 #include <cctype>
3
4 bool IsVokal(char c) {
5     c = std::tolower(c);
6     return c == 'a' || c == 'i' || c == 'u' || c == 'e' || c == 'o';
7 }
8
9 int main() {
10    char character = 'a';
11    if (IsVokal(character)) {
12        std::cout << "The character is a vowel." << std::endl;
13    } else {
14        std::cout << "The character is not a vowel." << std::endl;
15    }
16    return 0;
17 }
18
19

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Lenovo\Desktop\c444> & 'c:\Users\Lenovo\.vscode\extensions\ms-vscode.cpptools-1.20.2-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe' '--stdin
Microsoft-MIEngine-In-3aduf54.kmz' '--stdout=Microsoft-MIEngine-Out-frtne2y0.qqv' '--stderr=Microsoft-MIEngine-Error-tptufnp.11k' '--pid=Microsoft-MIEngine-P
id-t0cahaq.lrs' '--dbgExe=c:\mingw64\bin\gdb.exe' '--interpreter=mi'
The character is a vowel.
PS C:\Users\Lenovo\Desktop\c444>

```

4. a. Membuat larik tipe string bernama cars string cars[4] = {"Volvo", "BMW", "Ford", "Mazda"};

b. Buat penunjuk variabel dengan nama ptr, yang harus menunjuk ke variabel string bernama food: string food = "Pizza"; string* ptr = &food;