

Q1 - Write a program to check whether two numbers (entered by user) are equal or not.

```
Assignment_02 > Question01.cpp > main()
1  #include<iostream>
2  using namespace std;
3  int main(){
4      int x,y;
5      cout<<"Enter first number \n";
6      cin>>x;
7      cout<<"Enter second number \n";
8      cin>>y;
9      cout<<(x==y)?1:0;
10     return 0;
11 }
```

Q2 - Write a program to take the values of two variables a and b from the keyboard and then check if both the conditions 'a < 50' and 'a < b' are true.

```
Assignment_02 > Question_02.cpp > main()
1  #include<iostream>
2  using namespace std;
3  int main(){
4      int a,b;
5      cout<<"Enter first number \n";
6      cin>>a;
7      cout<<"Enter second number \n";
8      cin>>b;
9      cout<<((a<50)&&(a<b))?1:0;
10     return 0;
11 }
```

Q3 - There are 45 total pupils in the class, 25 of whom are boys. Write a program to find how many girls received grades "A" if 17 boys made up 80% of the students that received grades "A".

```
Assignment_02 > Question_03.cpp > main()
1 #include<iostream>
2 using namespace std;
3 int main(){
4     int total,boys,girls;
5     boys = 17;
6     total = (45*80)/100;
7     girls = total - boys;
8     cout<<"Number of girls getting grade A = "<<girls<<endl;
9     return 0;
10 }
```

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** PORTS

ses. If you want to re-enable it, run 'Import-Module PSReadLine'.

PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)> cd "c:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02\" ; if (\$?) { g++ Question_03.cpp -o Question_03 } ; if (\$?) { .\Question_03 }

Number of girls getting grade A =19

PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02> cd "c:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02\" ; if (\$?) { g++ Question_03.cpp -o Question_03 } ; if (\$?) { .\Question_03 }

Number of girls getting grade A =19

PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02>

Q4 - Write a program to calculate the sum of the first and the second last digit of a 5 digit number.

```
Assignment_02 > Question_04.cpp > main()
2 using namespace std;
3 int main(){
4     int num;
5     cout<<"Enter any five digit number\n";
6     cin>>num;
7     int f1,s2,t3,f4,f5;
8     f1 = num/10000;
9     num = num % 10000;
10    s2 = num / 1000;
11    num = num % 1000;
12    t3 = num / 100;
13    num = num % 100;
14    f4 = num / 10;
15    f5 = num % 10;
16    cout<<f1<<endl<<s2<<endl<<t3<<endl<<f4<<endl<<f5<<endl;
17    cout<<"The Sum of first and last digit of the number is = "<<f1+f5;
18    return 0;
19 }
```

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PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02> cd "c:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02\" ; if (\$?) { g++ Question_04.cpp -o Question_04 } ; if (\$?) { .\Question_04 }

Enter any five digit number

43567

4

3

5

6

7

The Sum of first and last digit of the number is = 11

PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02>

Q5 - Write a program to calculate the sum of digits of a 3 digit number.

```
Assignment_02 > Question_05.cpp > main()
1  #include<iostream>
2  using namespace std;
3  int main(){
4      int num;
5      cout<<"Enter a number of three digit \n";
6      cin>>num;
7      int first,second,third;
8      first = num / 100;
9      num = num % 100;
10     second = num / 10;
11     third = num %10;
12     cout<<"The sum of digits are = "<<first+second+third;
13     return 0;
14 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

Warning: PowerShell detected that you might be using a screen reader and has disabled PSReadLine for compatibility purposes. If you want to re-enable it, run 'Import-Module PSReadLine'.

PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02> cd "c:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02\" ; if (\$?) { g++ Question_05.cpp -o Question_05 } ; if (\$?) { .\Question_05 }

Enter a number of three digit
436
The sum of digits are = 13
PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02> |

Q6 - Design a calculator to perform basic arithmetic operations (+,-,/,*,%).

```
File Edit Selection View Go Run ... C++ (OOPs)
EXPLORER on_01.cpp Question01.cpp Question_02.cpp Question_03.cpp Question_04.cpp Question_05.cpp Question_06.cpp x
C++ (OOPs)
  Assignment_01
  Assignment_02
    module.exe
    Question_02.cpp
    Question_02.exe
    Question_03.cpp
    Question_03.exe
    Question_04.cpp
    Question_04.exe
    Question_05.cpp
    Question_05.exe
    Question_06.cpp
    Question_06.exe
    Question01.cpp
    Question01.exe
  BasicOfC++
  Home_Task
  Operators
  Variables
OUTLINE
TIMELINE
```

```
Assignment_02 > Question_06.cpp > main()
1  #include<iostream>
2  using namespace std;
3  int main(){
4      float x,y;
5      cout<<"Enter first number \n";
6      cin>>x;
7      cout<<"Enter second number \n";
8      cin>>y;
9      cout<<"Sum = "<<int(x+y)<<endl;
10     cout<<"Difference = "<<int(x-y)<<endl;
11     cout<<"Product = "<<int(x*y)<<endl;
12     cout<<"Division = "<<(x/y);
13     return 0;
14 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02> cd "c:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02\" ; if (\$?) { g++ Question_06.cpp -o Question_06 } ; if (\$?) { .\Question_06 }

Enter first number
7
Enter second number
2
Sum = 9
Difference = 5
Product = 14
Division = 3.5
PS C:\Users\HAJI LAPTOP KARACHI\OneDrive\Desktop\C++ (OOPs)\Assignment_02>

Ln 14, Col 2 Spaces: 4 UTF-8 CRLF C++ Win32

23°C Smoke 8:11 PM 12/1/2023