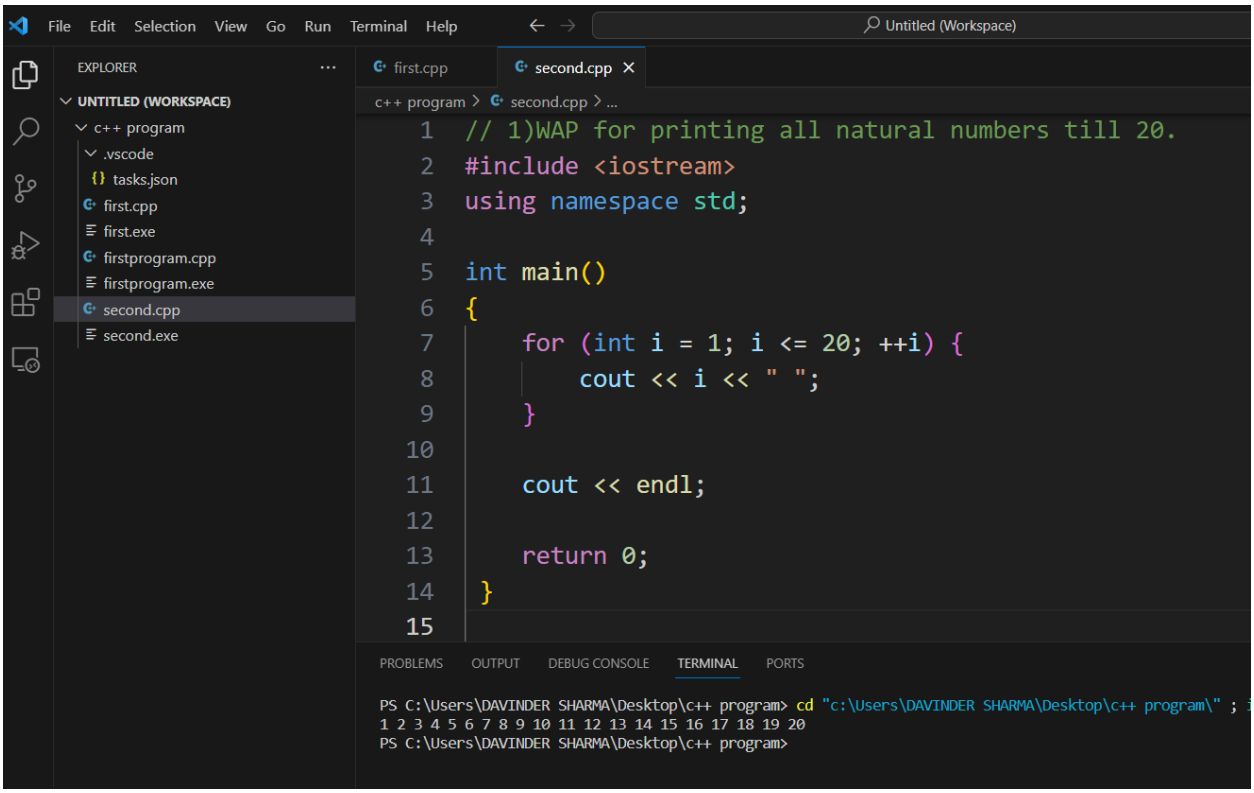
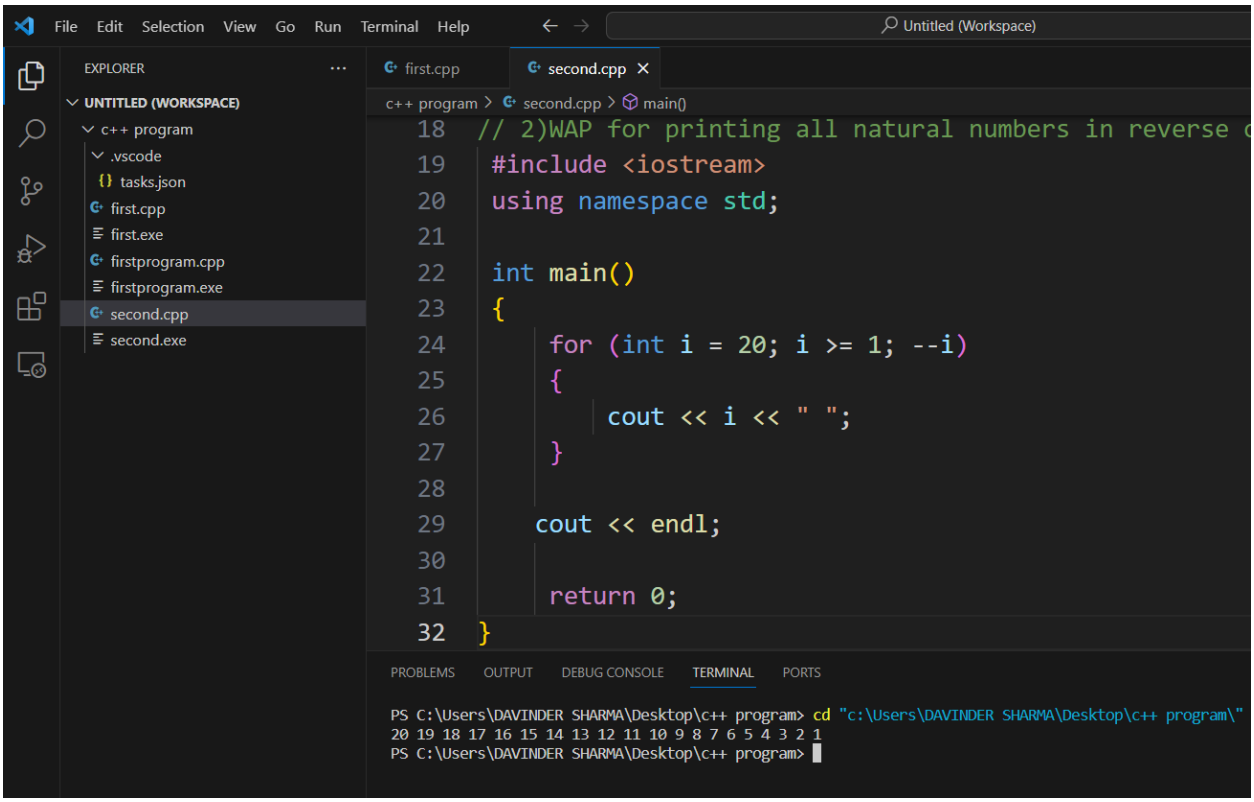
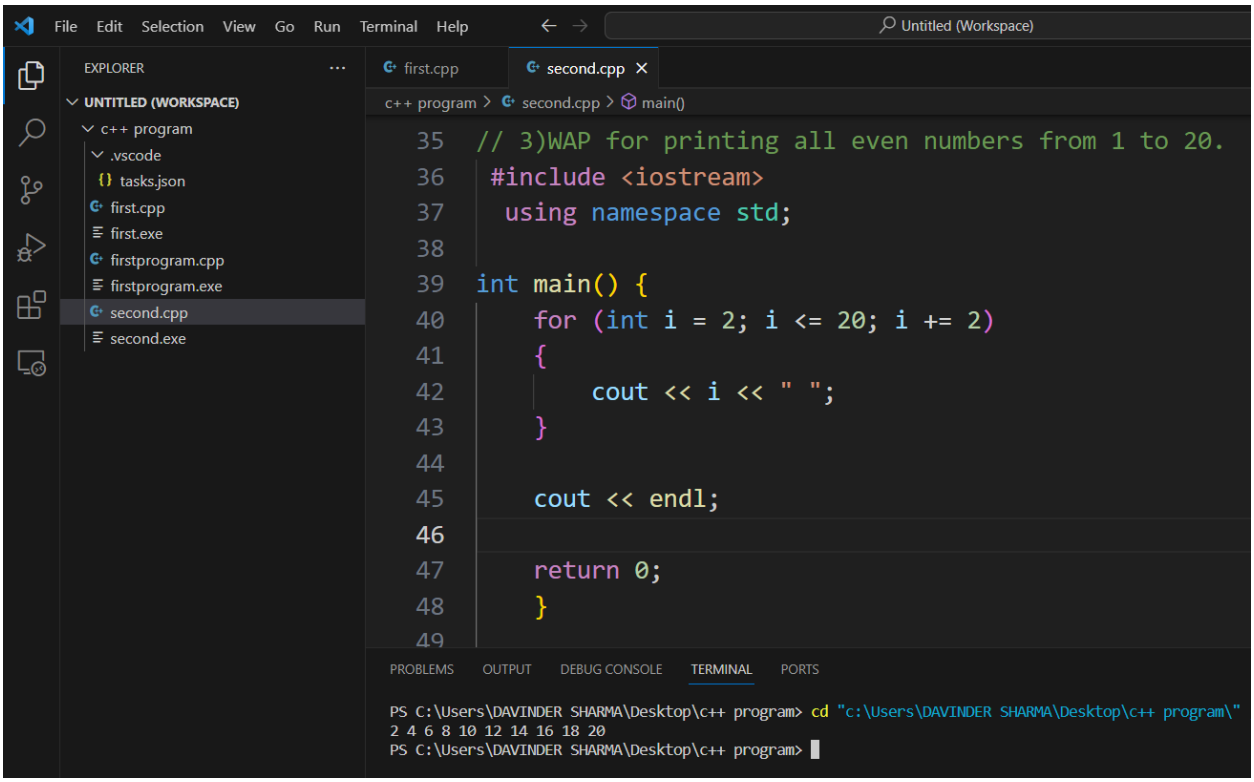
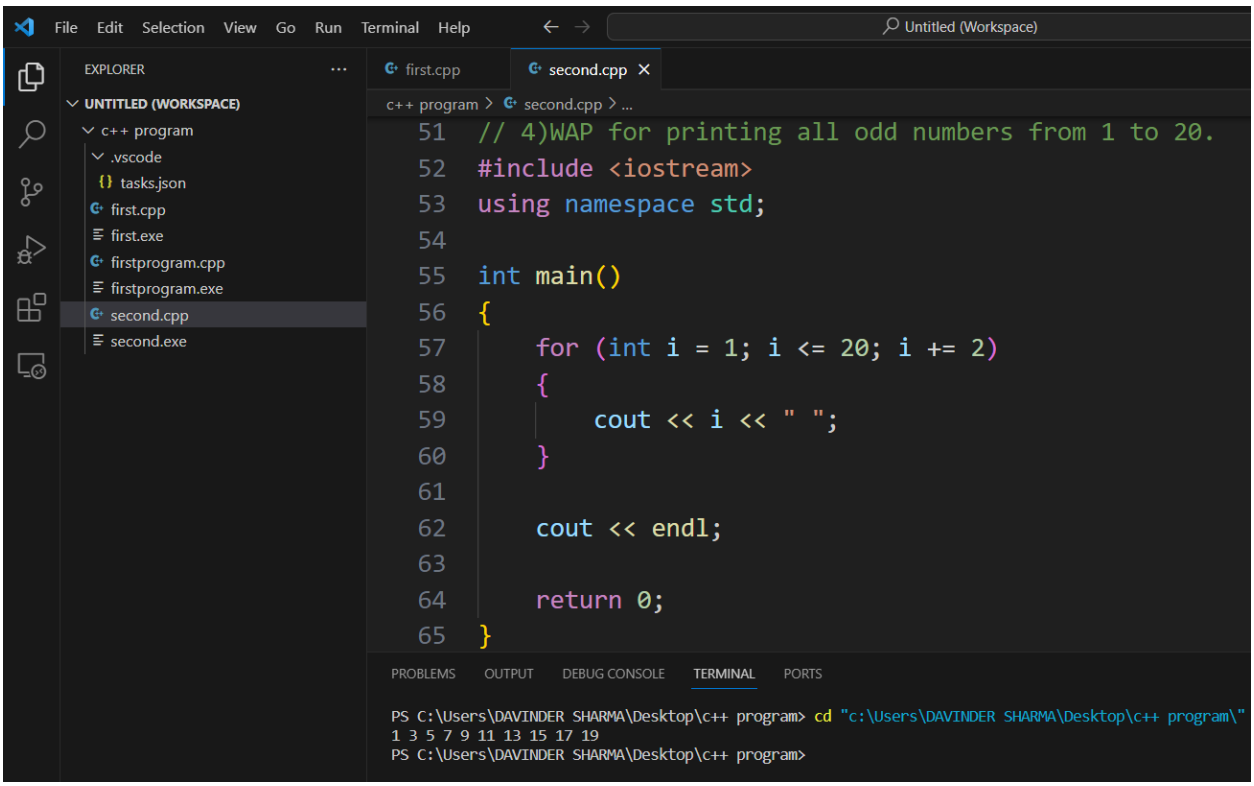
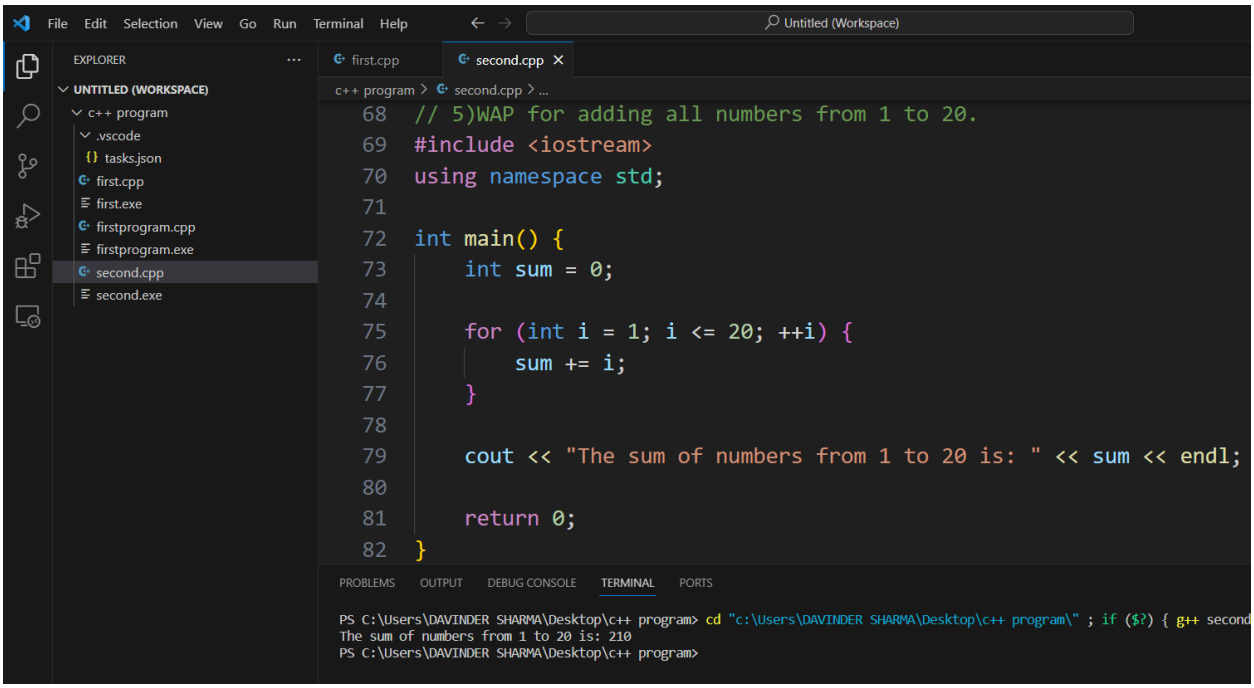
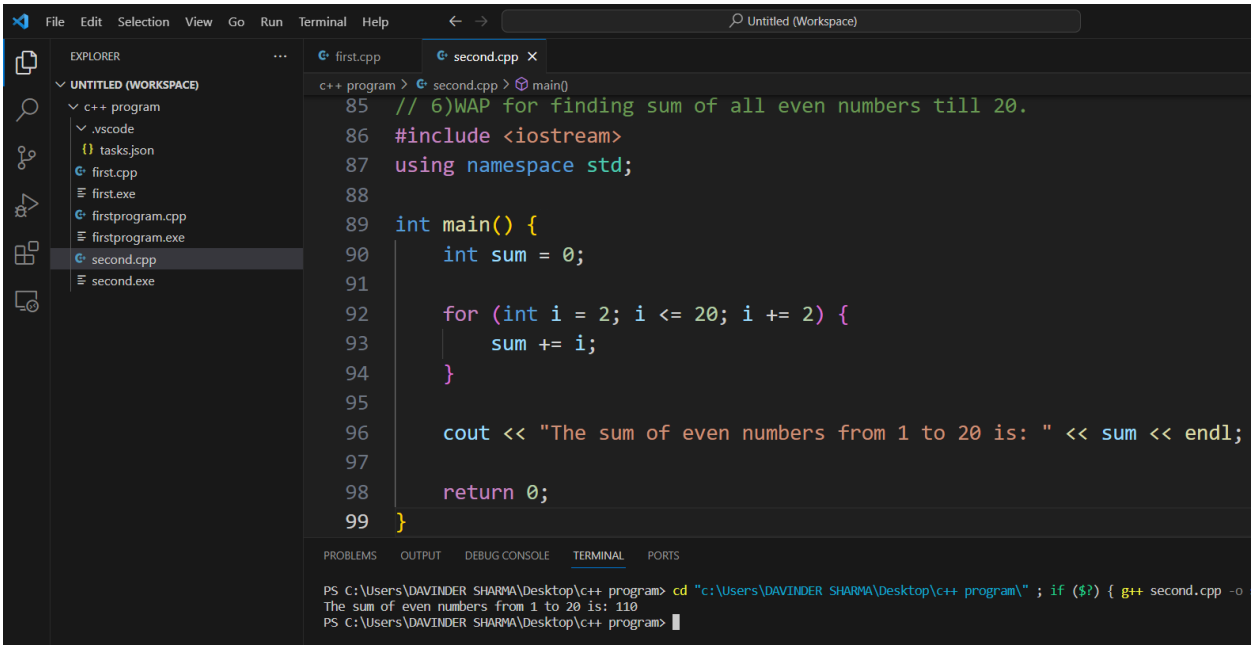

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > ...
1 // 1)WAP for printing all natural numbers till 20.
2 #include <iostream>
3 using namespace std;
4
5 int main()
6 {
7 for (int i = 1; i <= 20; ++i) {
8 cout << i << " ";
9 }
10
11 cout << endl;
12
13 return 0;
14 }
15
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; i
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

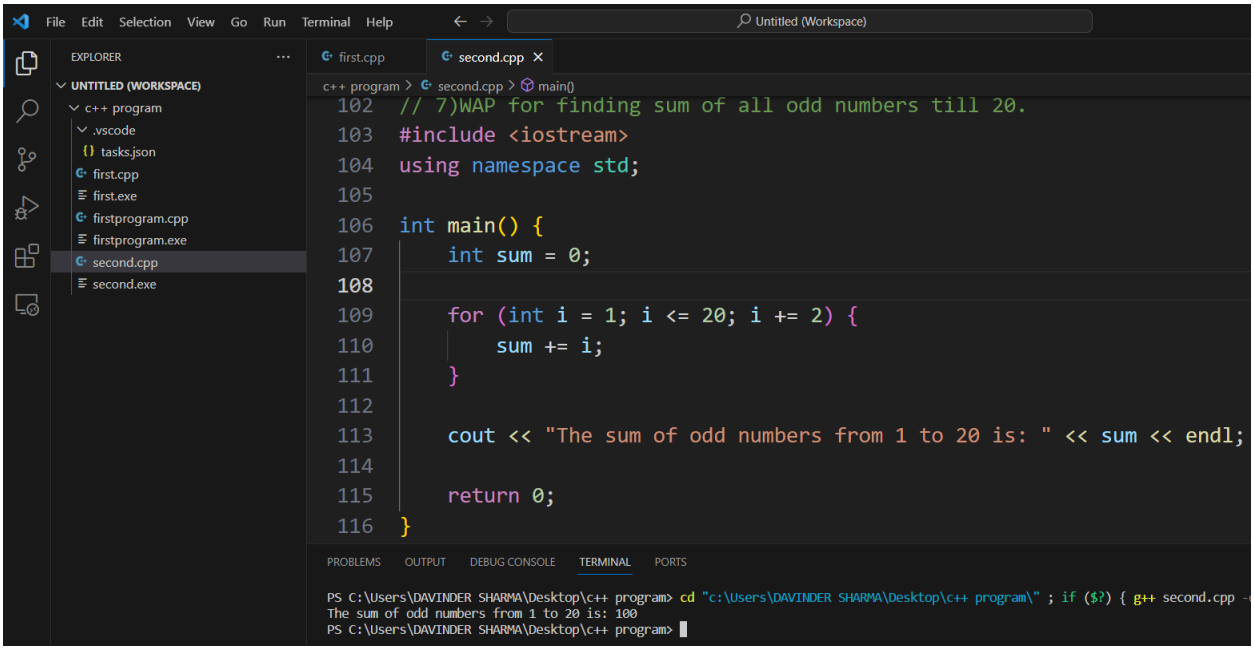

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > main()
18 // 2)WAP for printing all natural numbers in reverse
19 #include <iostream>
20 using namespace std;
21
22 int main()
23 {
24 for (int i = 20; i >= 1; --i)
25 {
26 cout << i << " ";
27 }
28
29 cout << endl;
30
31 return 0;
32 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

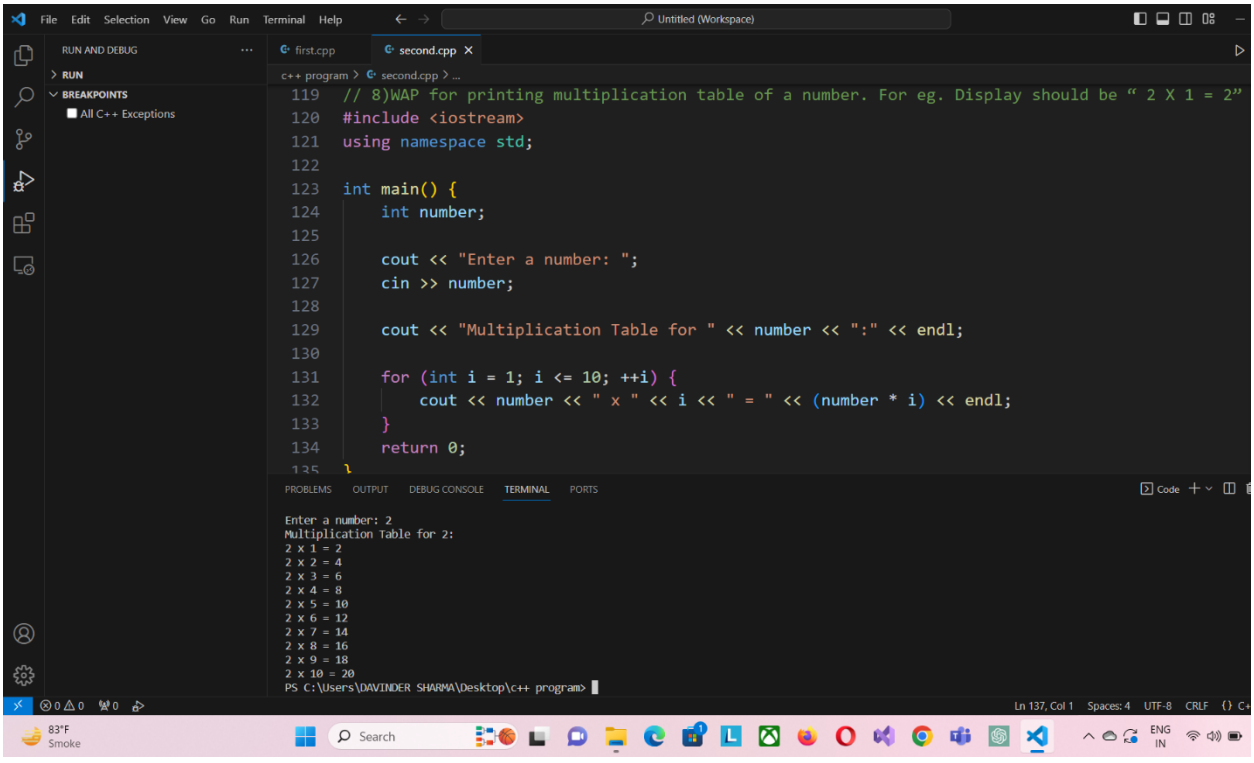

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > main()
35 // 3)WAP for printing all even numbers from 1 to 20.
36 #include <iostream>
37 using namespace std;
38
39 int main() {
40 for (int i = 2; i <= 20; i += 2)
41 {
42 cout << i << " ";
43 }
44
45 cout << endl;
46
47 return 0;
48 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
2 4 6 8 10 12 14 16 18 20
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

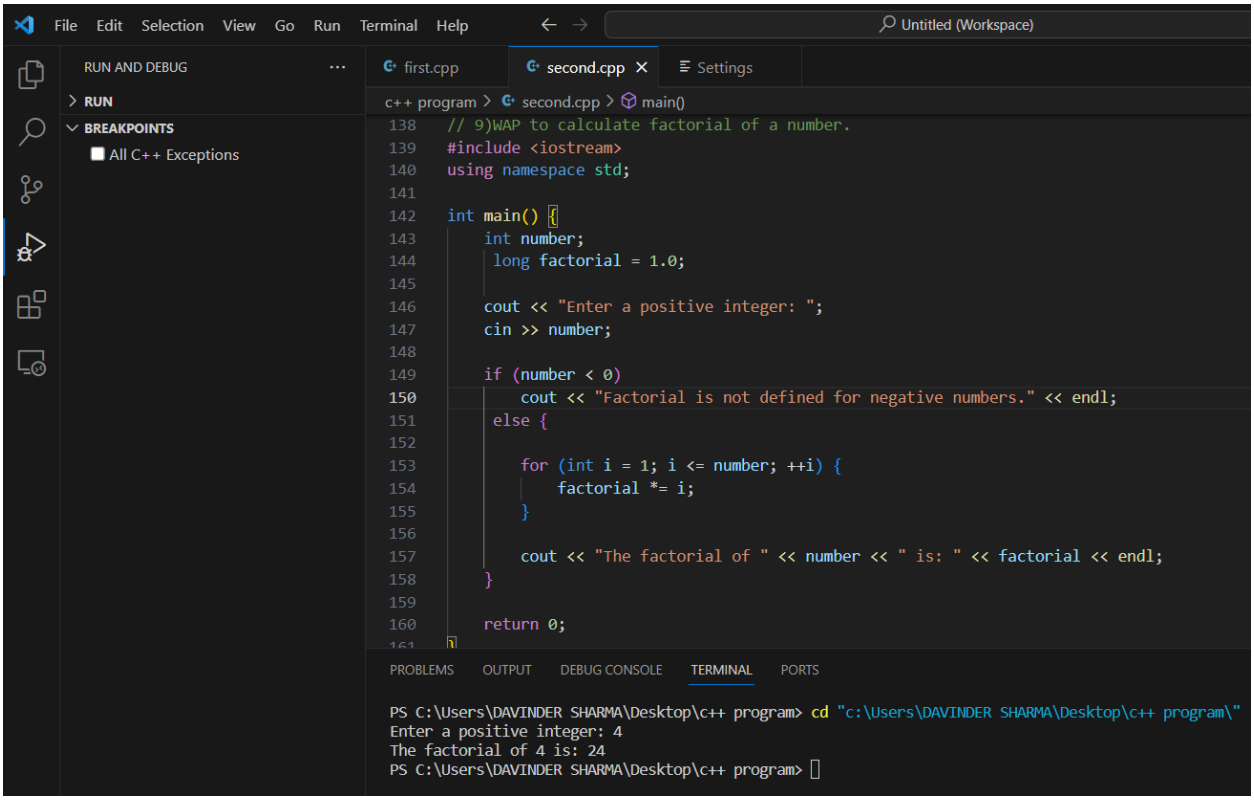

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > ...
51 // 4)WAP for printing all odd numbers from 1 to 20.
52 #include <iostream>
53 using namespace std;
54
55 int main()
56 {
57 for (int i = 1; i <= 20; i += 2)
58 {
59 cout << i << " ";
60 }
61
62 cout << endl;
63
64 return 0;
65 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
1 3 5 7 9 11 13 15 17 19
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

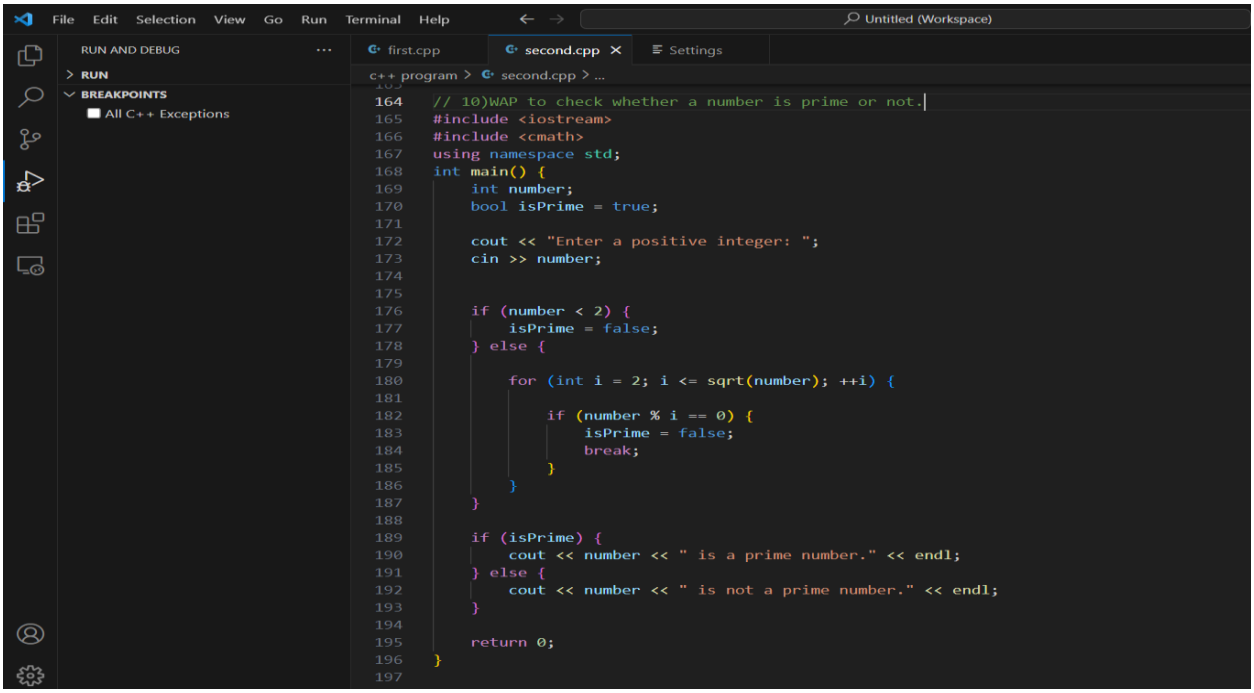

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > ...
68 // 5)WAP for adding all numbers from 1 to 20.
69 #include <iostream>
70 using namespace std;
71
72 int main() {
73 int sum = 0;
74
75 for (int i = 1; i <= 20; ++i) {
76 sum += i;
77 }
78
79 cout << "The sum of numbers from 1 to 20 is: " << sum << endl;
80
81 return 0;
82 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second
The sum of numbers from 1 to 20 is: 210
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

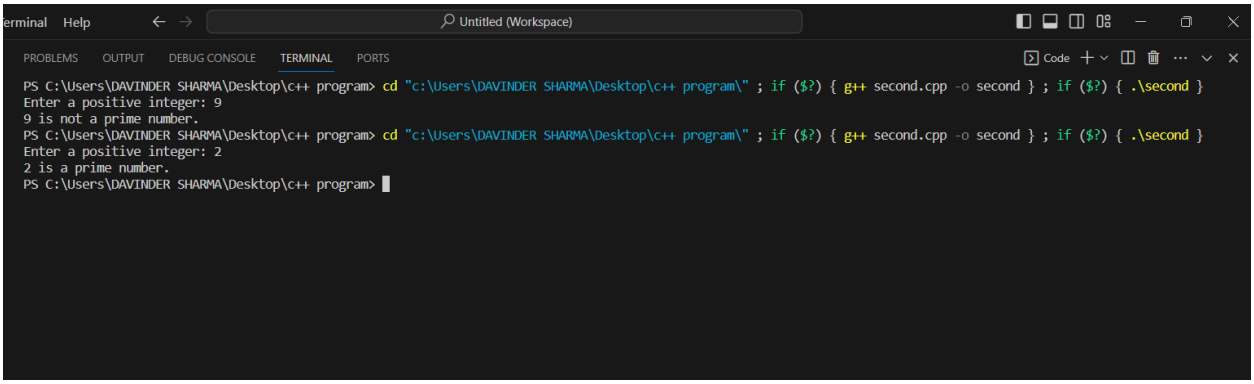

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > main()
85 // 6)WAP for finding sum of all even numbers till 20.
86 #include <iostream>
87 using namespace std;
88
89 int main() {
90 int sum = 0;
91
92 for (int i = 2; i <= 20; i += 2) {
93 sum += i;
94 }
95
96 cout << "The sum of even numbers from 1 to 20 is: " << sum << endl;
97
98 return 0;
99 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o
The sum of even numbers from 1 to 20 is: 110
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

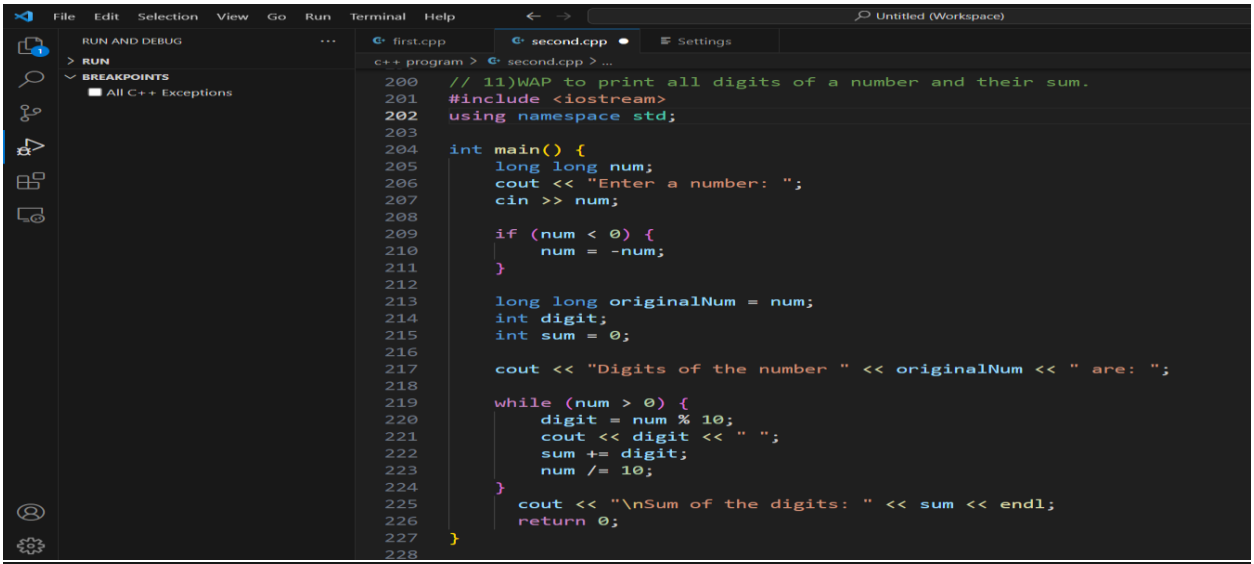

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
EXPLORER
UNTITLED (WORKSPACE)
c++ program
.vscode
tasks.json
first.cpp
first.exe
firstprogram.cpp
firstprogram.exe
second.cpp
second.exe
first.cpp
second.cpp
c++ program > second.cpp > main()
// 7)WAP for finding sum of all odd numbers till 20.
#include <iostream>
using namespace std;
int main() {
int sum = 0;
for (int i = 1; i <= 20; i += 2) {
sum += i;
}
cout << "The sum of odd numbers from 1 to 20 is: " << sum << endl;
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp
The sum of odd numbers from 1 to 20 is: 100
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

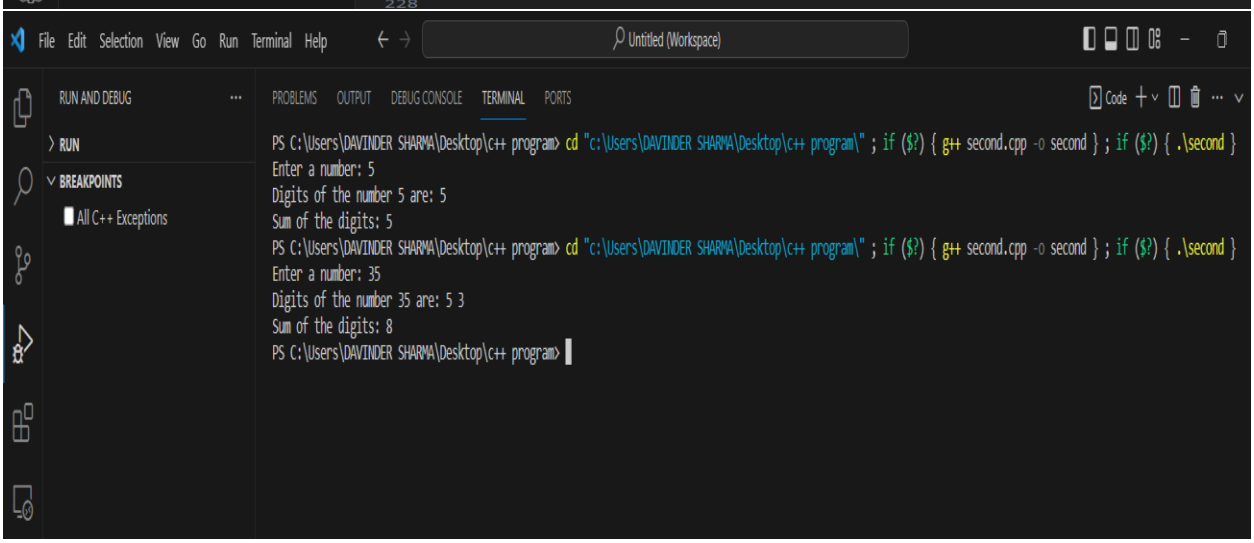

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
c++ program > second.cpp > ...
// 8)WAP for printing multiplication table of a number. For eg. Display should be " 2 X 1 = 2"
#include <iostream>
using namespace std;
int main() {
int number;
cout << "Enter a number: ";
cin >> number;
cout << "Multiplication Table for " << number << ":" << endl;
for (int i = 1; i <= 10; ++i) {
cout << number << " x " << i << " = " << (number * i) << endl;
}
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Code
Enter a number: 2
Multiplication Table for 2:
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>
Ln 137, Col 1 Spaces: 4 UTF-8 CRLF
83°F
Smoke
Search
ENG
IN

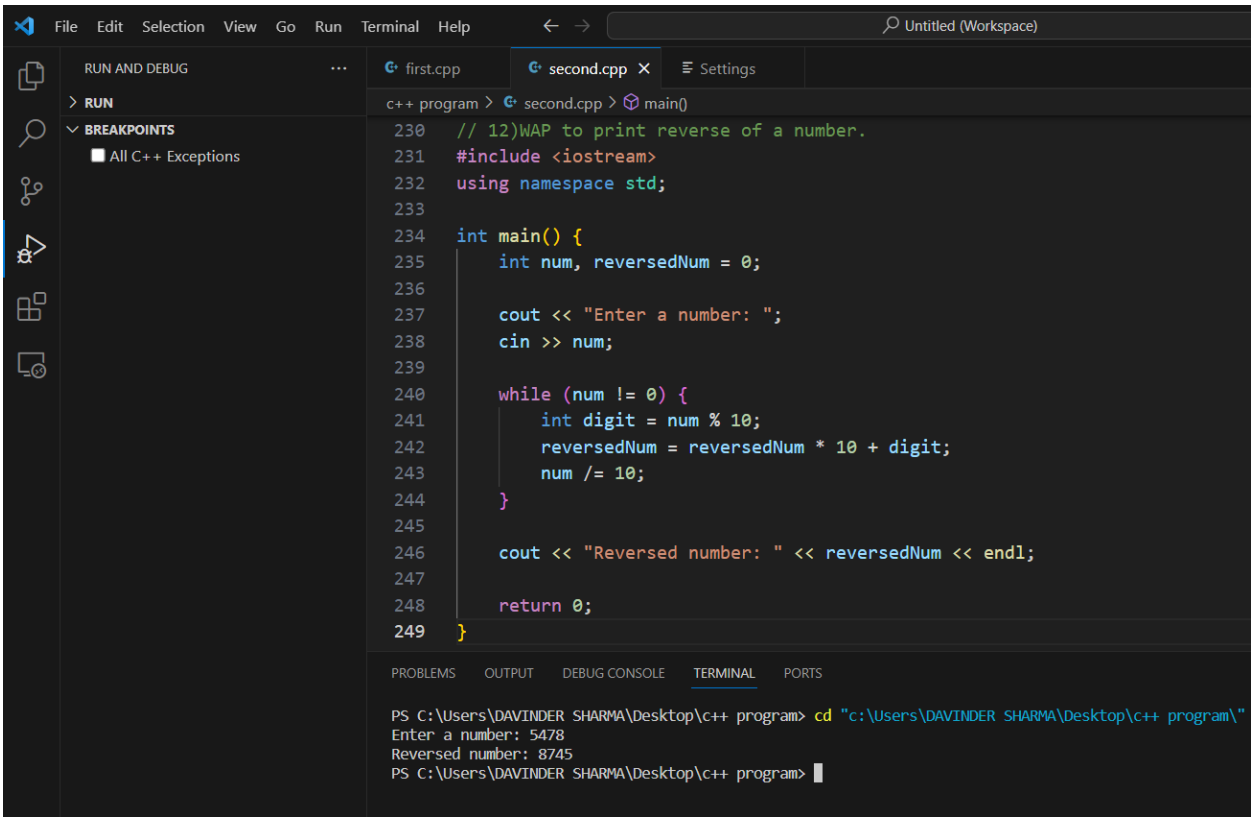

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > main()
// 9)WAP to calculate factorial of a number.
#include <iostream>
using namespace std;
int main() {
int number;
long factorial = 1.0;
cout << "Enter a positive integer: ";
cin >> number;
if (number < 0)
cout << "Factorial is not defined for negative numbers." << endl;
else {
for (int i = 1; i <= number; ++i) {
factorial *= i;
}
cout << "The factorial of " << number << " is: " << factorial << endl;
}
return 0;
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
Enter a positive integer: 4
The factorial of 4 is: 24
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

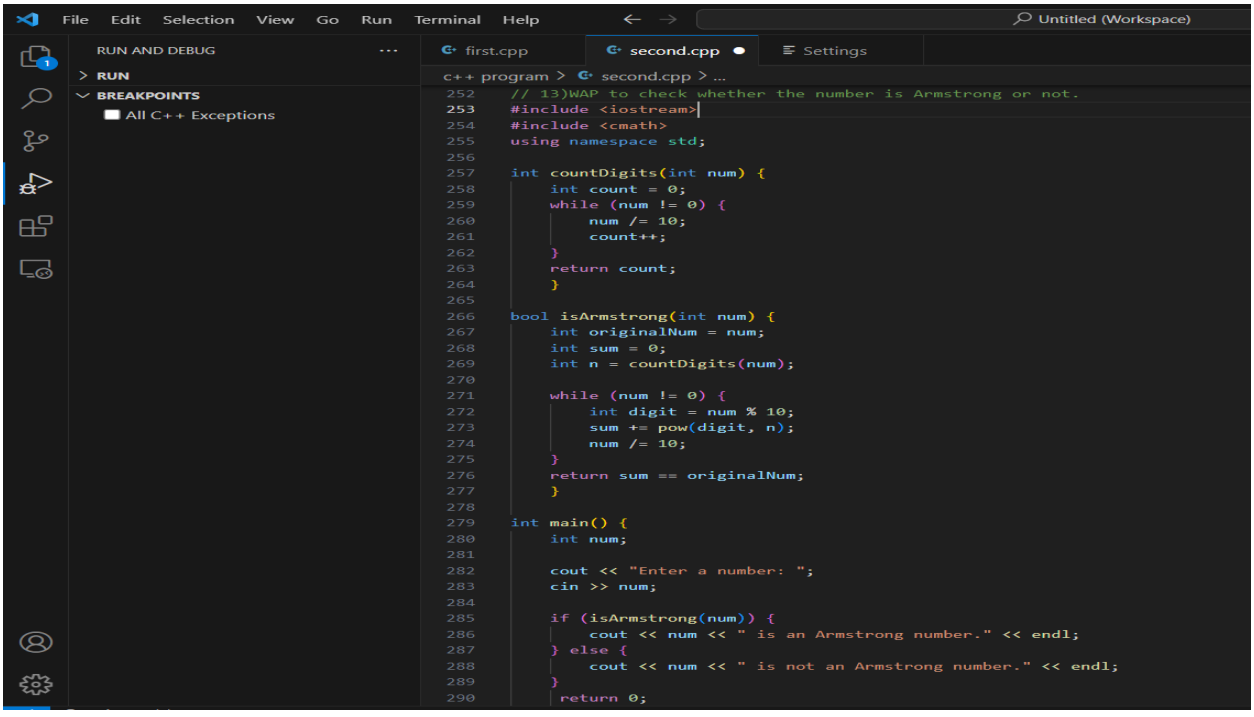

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > ...
// 10)WAP to check whether a number is prime or not.
#include <iostream>
#include <cmath>
using namespace std;
int main() {
int number;
bool isPrime = true;
cout << "Enter a positive integer: ";
cin >> number;
if (number < 2) {
isPrime = false;
} else {
for (int i = 2; i <= sqrt(number); ++i) {
if (number % i == 0) {
isPrime = false;
break;
}
}
}
if (isPrime) {
cout << number << " is a prime number." << endl;
} else {
cout << number << " is not a prime number." << endl;
}
return 0;
}

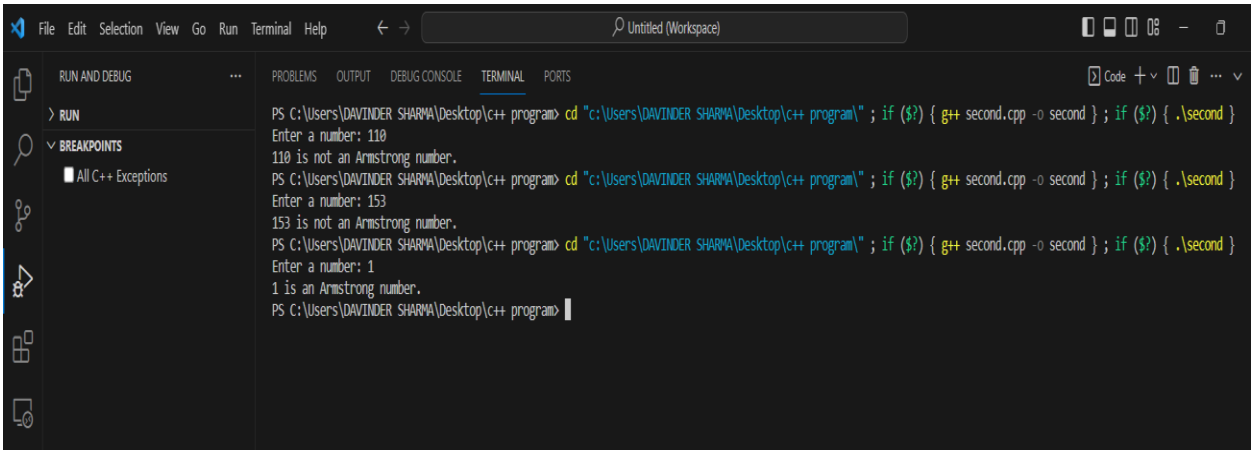

Help
Untitled (Workspace)
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Code
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a positive integer: 9
9 is not a prime number.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a positive integer: 2
2 is a prime number.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>

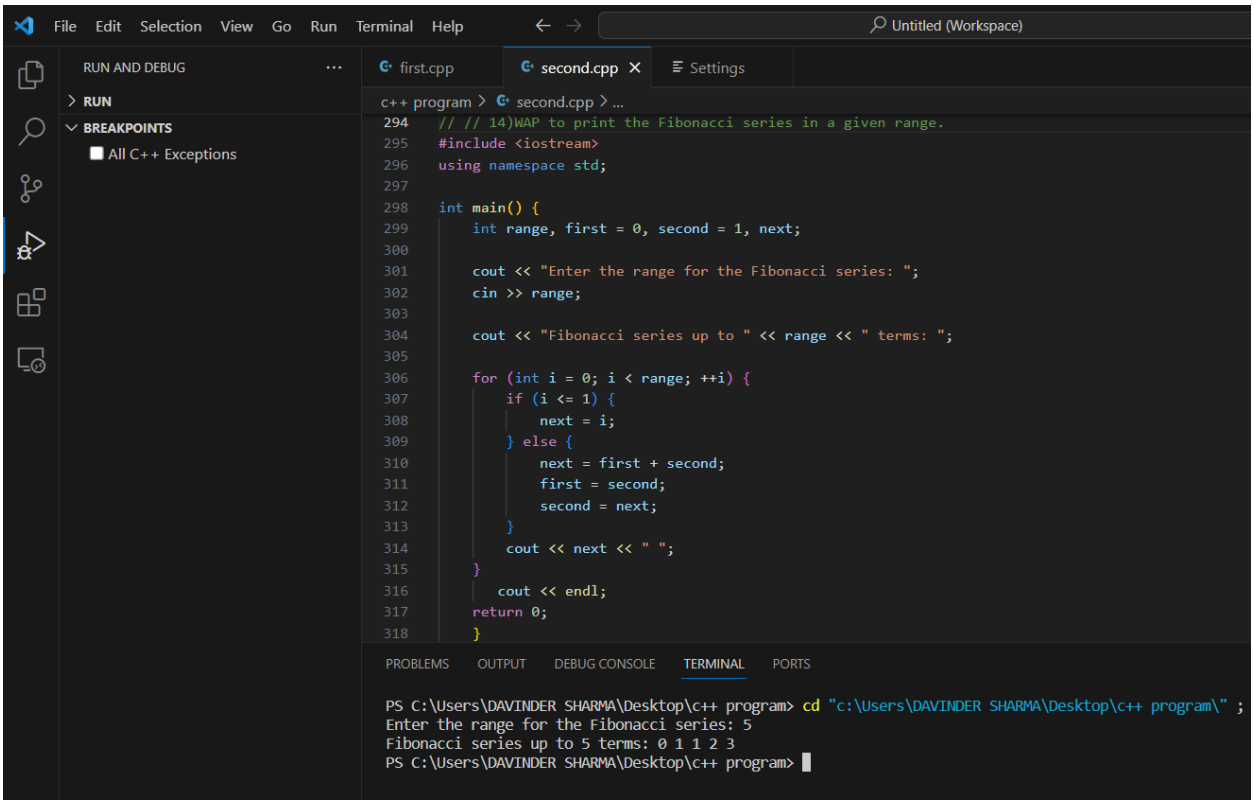

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > ...
// 11)WAP to print all digits of a number and their sum.
#include <iostream>
using namespace std;
int main() {
long long num;
cout << "Enter a number: ";
cin >> num;
if (num < 0) {
num = -num;
}
long long originalNum = num;
int digit;
int sum = 0;
cout << "Digits of the number " << originalNum << " are: ";
while (num > 0) {
digit = num % 10;
cout << digit << " ";
sum += digit;
num /= 10;
}
cout << "\nSum of the digits: " << sum << endl;
return 0;
}

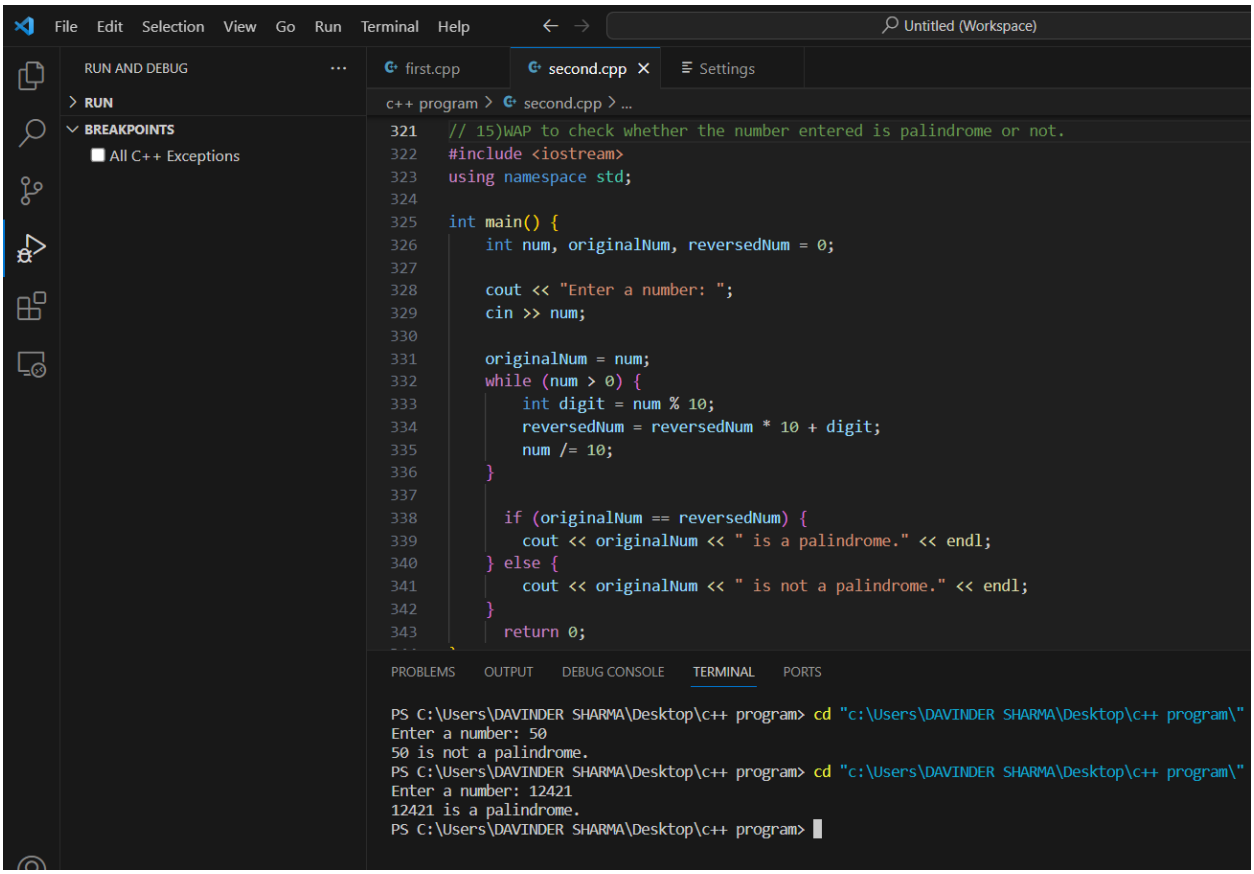

File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
Code
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a number: 5
Digits of the number 5 are: 5
Sum of the digits: 5
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a number: 35
Digits of the number 35 are: 5 3
Sum of the digits: 8
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>


File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > main()
// 12)WAP to print reverse of a number.
#include <iostream>
using namespace std;
int main() {
int num, reversedNum = 0;
cout << "Enter a number: ";
cin >> num;
while (num != 0) {
int digit = num % 10;
reversedNum = reversedNum * 10 + digit;
num /= 10;
}
cout << "Reversed number: " << reversedNum << endl;
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
Enter a number: 5478
Reversed number: 8745
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>


File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > ...
// 13)WAP to check whether the number is Armstrong or not.
#include <iostream>
#include <cmath>
using namespace std;
int countDigits(int num) {
int count = 0;
while (num != 0) {
num /= 10;
count++;
}
return count;
}
bool isArmstrong(int num) {
int originalNum = num;
int sum = 0;
int n = countDigits(num);
while (num != 0) {
int digit = num % 10;
sum += pow(digit, n);
num /= 10;
}
return sum == originalNum;
}
int main() {
int num;
cout << "Enter a number: ";
cin >> num;
if (isArmstrong(num)) {
cout << num << " is an Armstrong number." << endl;
} else {
cout << num << " is not an Armstrong number." << endl;
}
return 0;


File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Code
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a number: 110
110 is not an Armstrong number.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a number: 153
153 is not an Armstrong number.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ; if ($?) { g++ second.cpp -o second } ; if ($?) { .\second }
Enter a number: 1
1 is an Armstrong number.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>


File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > ...
// // 14)WAP to print the Fibonacci series in a given range.
#include <iostream>
using namespace std;
int main() {
int range, first = 0, second = 1, next;
cout << "Enter the range for the Fibonacci series: ";
cin >> range;
cout << "Fibonacci series up to " << range << " terms: ";
for (int i = 0; i < range; ++i) {
if (i <= 1) {
next = i;
} else {
next = first + second;
first = second;
second = next;
}
cout << next << " ";
}
cout << endl;
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\" ;
Enter the range for the Fibonacci series: 5
Fibonacci series up to 5 terms: 0 1 1 2 3
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>


File Edit Selection View Go Run Terminal Help
Untitled (Workspace)
RUN AND DEBUG
RUN
BREAKPOINTS
All C++ Exceptions
first.cpp
second.cpp
Settings
c++ program > second.cpp > ...
// 15)WAP to check whether the number entered is palindrome or not.
#include <iostream>
using namespace std;
int main() {
int num, originalNum, reversedNum = 0;
cout << "Enter a number: ";
cin >> num;
originalNum = num;
while (num > 0) {
int digit = num % 10;
reversedNum = reversedNum * 10 + digit;
num /= 10;
}
if (originalNum == reversedNum) {
cout << originalNum << " is a palindrome." << endl;
} else {
cout << originalNum << " is not a palindrome." << endl;
}
return 0;
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
Enter a number: 50
50 is not a palindrome.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program> cd "c:\Users\DAVINDER SHARMA\Desktop\c++ program\"
Enter a number: 12421
12421 is a palindrome.
PS C:\Users\DAVINDER SHARMA\Desktop\c++ program>