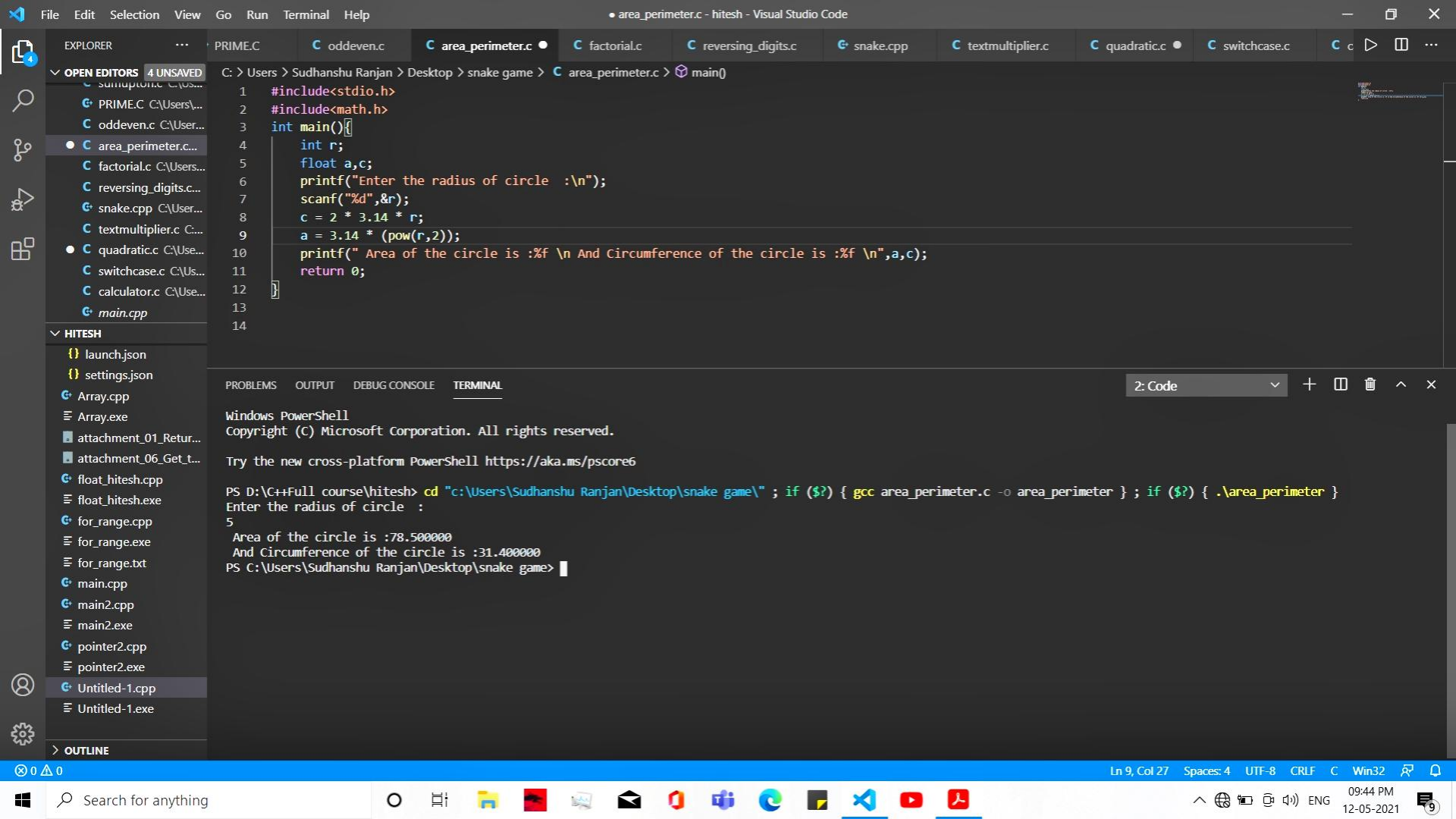
1. Write a program in C to find the area and perimeter of a circle.

```
#include <stdio.h>
#include <math.h>
int main ( ) {
int r;
float a, c;
Printf ("Enter the radius of circle :\n");
Scanf ("%d", &r);
c = 2 * 3.14 * r;
a = 3.14 * (pow (r, 2));
Printf (" Area of the circle is : %f \n
    and Circumference of the circle is : %f\n",
        a, c);
return 0;
}
```


File Edit Selection View Go Run Terminal Help
• area_perimeter.c - hitesh - Visual Studio Code
EXPLORER
PRIME.C
oddeven.c
area_perimeter.c
factorial.c
reversing_digits.c
snake.cpp
textmultiplier.c
quadratic.c
switchcase.c
OPEN EDITORS 4 UNSAVED
PRIME.C C:\Users\...
oddeven.c C:\User...
area_perimeter.c...
factorial.c C:\Users...
reversing_digits.c...
snake.cpp C:\User...
textmultiplier.c C:...
quadratic.c C:\Use...
switchcase.c C:\Us...
calculator.c C:\Use...
main.cpp
HITESH
launch.json
settings.json
Array.cpp
Array.exe
attachment_01_Retur...
attachment_06_Get_t...
float_hitesh.cpp
float_hitesh.exe
for_range.cpp
for_range.exe
for_range.txt
main.cpp
main2.cpp
main2.exe
pointer2.cpp
pointer2.exe
Untitled-1.cpp
Untitled-1.exe
OUTLINE
C: > Users > Sudhanshu Ranjan > Desktop > snake game > area_perimeter.c > main()
#include<stdio.h>
#include<math.h>
int main(){
int r;
float a,c;
printf("Enter the radius of circle :\n");
scanf("%d",&r);
c = 2 * 3.14 * r;
a = 3.14 * (pow(r,2));
printf(" Area of the circle is :%f \n And Circumference of the circle is :%f \n",a,c);
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
2: Code
Windows PowerShell
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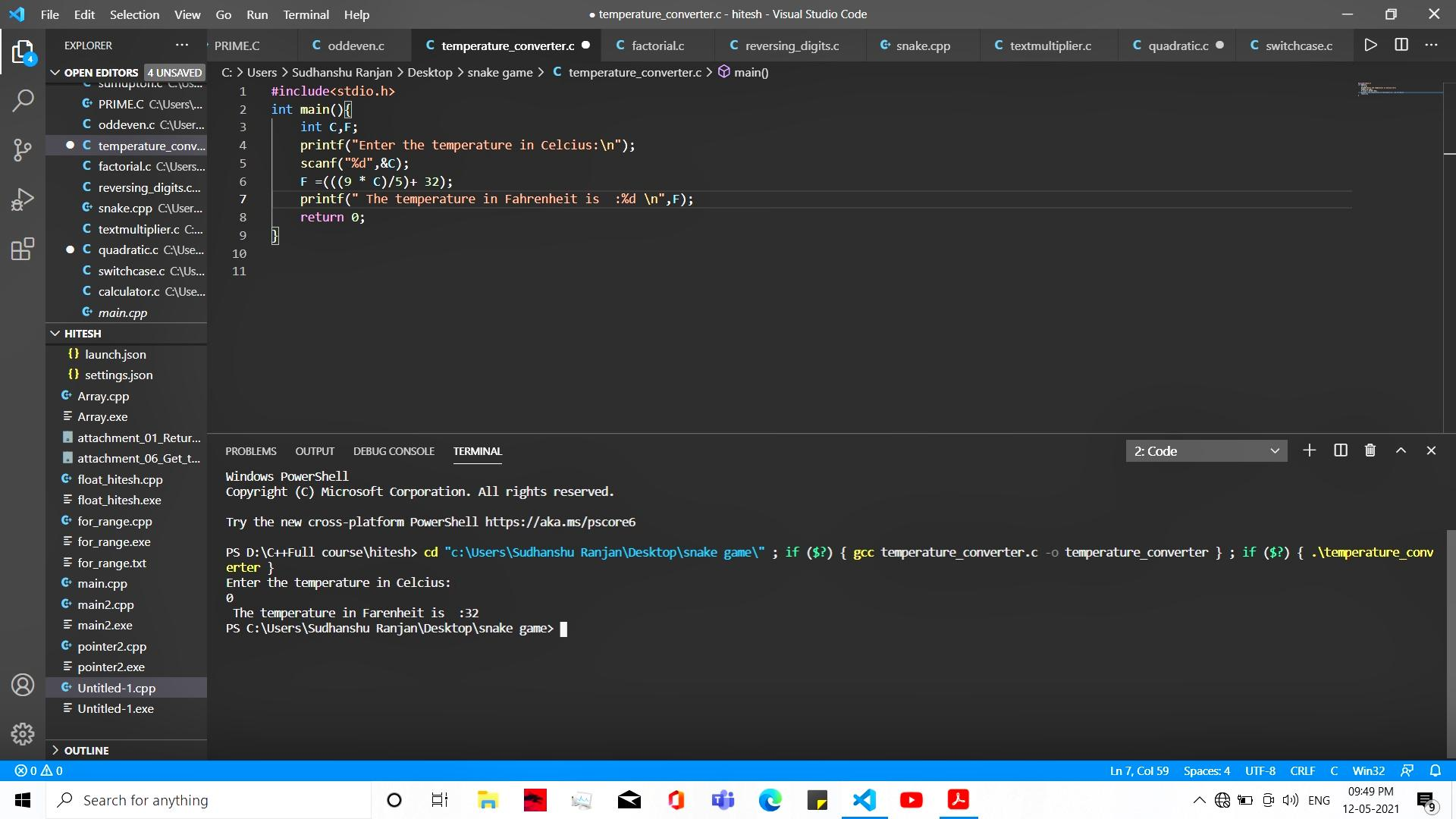
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS D:\C++Full course\hitesh> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc area_perimeter.c -o area_perimeter } ; if ($?) { .\area_perimeter }
Enter the radius of circle :
5
Area of the circle is :78.500000
And Circumference of the circle is :31.400000
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game>
Ln 9, Col 27 Spaces: 4 UTF-8 CRLF C Win32
Search for anything
ENG
09:44 PM
12-05-2021

2. WAP in C to convert given temperature from Celsius to Fahrenheit.

```
#include <stdio.h>
int main(){
    int C, F;
    Printf("Enter the temperature in Celcius: \n");
    Scanf("%d", &C);
    F = (((9 * C)/5) + 32);
    Printf("The temperature in Fahrenheit is:
            %d \n", F);
    return 0;
}
```


File Edit Selection View Go Run Terminal Help
• temperature_converter.c - hitesh - Visual Studio Code
EXPLORER
PRIME.C
oddeven.c
temperature_converter.c
factorial.c
reversing_digits.c
snake.cpp
textmultiplier.c
quadratic.c
switchcase.c
OPEN EDITORS 4 UNSAVED
PRIME.C C:\Users\...
oddeven.c C:\User...
temperature_conv...
factorial.c C:\Users...
reversing_digits.c...
snake.cpp C:\User...
textmultiplier.c C:...
quadratic.c C:\Use...
switchcase.c C:\Us...
calculator.c C:\Use...
main.cpp
HITESH
launch.json
settings.json
Array.cpp
Array.exe
attachment_01_Retur...
attachment_06_Get_t...
float_hitesh.cpp
float_hitesh.exe
for_range.cpp
for_range.exe
for_range.txt
main.cpp
main2.cpp
main2.exe
pointer2.cpp
pointer2.exe
Untitled-1.cpp
Untitled-1.exe
OUTLINE
C: > Users > Sudhanshu Ranjan > Desktop > snake game > temperature_converter.c > main()
#include<stdio.h>
int main(){
int C,F;
printf("Enter the temperature in Celcius:\n");
scanf("%d",&C);
F =(((9 * C)/5)+ 32);
printf(" The temperature in Fahrenheit is :%d \n",F);
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
2: Code
Windows PowerShell
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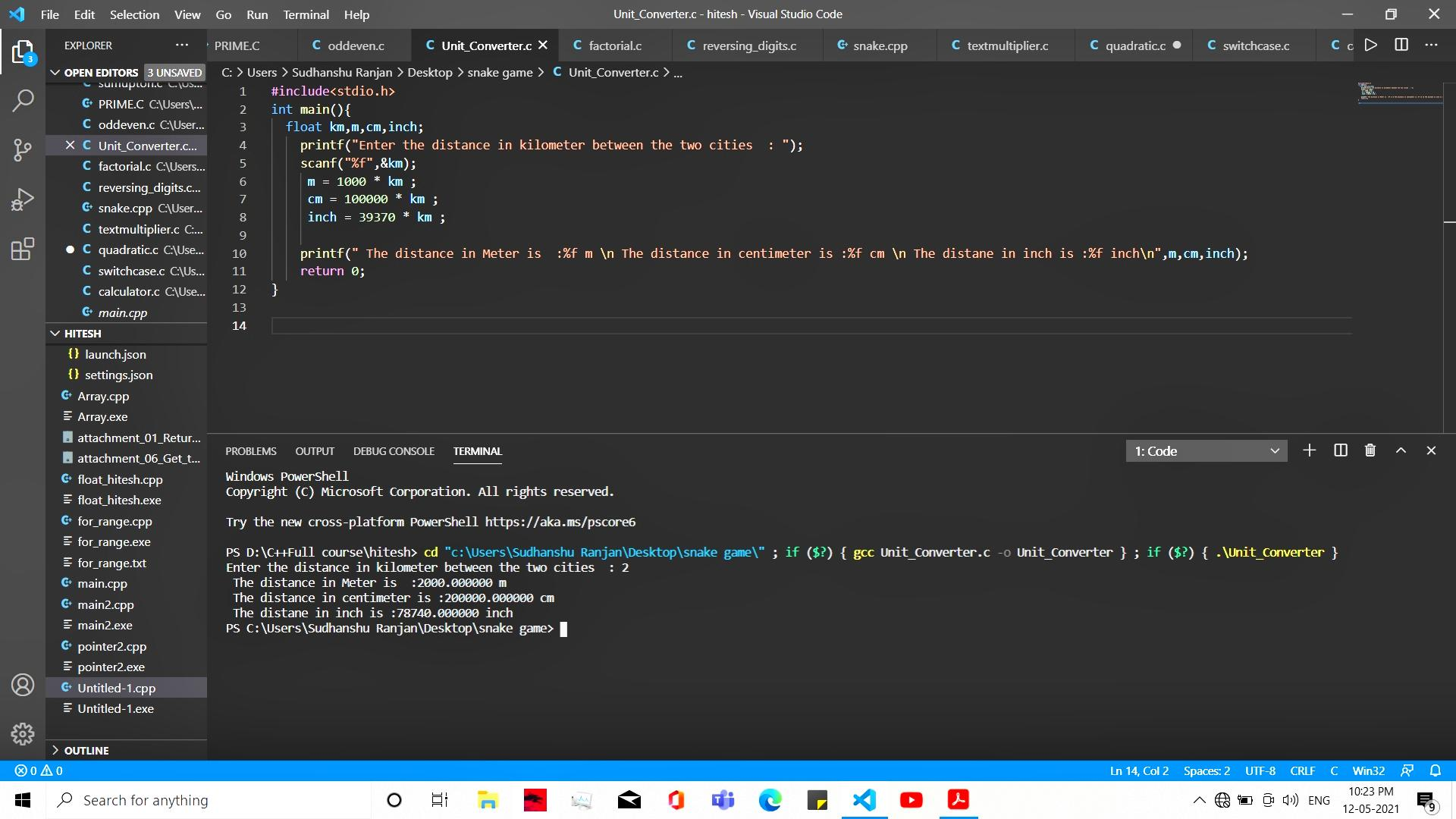
PS D:\C++Full course\hitesh> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc temperature_converter.c -o temperature_converter } ; if ($?) { .\temperature_converter }
Enter the temperature in Celcius:
0
The temperature in Farenheit is :32
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game>
Ln 7, Col 59 Spaces: 4 UTF-8 CRLF C Win32
Search for anything
ENG
09:49 PM
12-05-2021

3. WAP in C to convert given distance between two cities in km to meter, centimeter and inches.

```
#include<stdio.h>
int main(){
float km, m, cm, inch;
Printf("Enter the distance in km between the
        two cities : ");
Scanf("%f", &km);
m= 1000 * km;
cm = 100000 * km;
inch = 39370 * km;
Printf("The distance in Meter is : %f\n. The
        distance in centimeter is : %of\n The
        distance in inch is : %of\n", m, cm, inch);
return 0;
}
```


File Edit Selection View Go Run Terminal Help
Unit_Converter.c - hitesh - Visual Studio Code
EXPLORER
PRIME.C
oddeven.c
Unit_Converter.c
factorial.c
reversing_digits.c
snake.cpp
textmultiplier.c
quadratic.c
switchcase.c
OPEN EDITORS 3 UNSAVED
PRIME.C C:\Users\...
oddeven.c C:\User...
Unit_Converter.c...
factorial.c C:\Users...
reversing_digits.c...
snake.cpp C:\User...
textmultiplier.c C:...
quadratic.c C:\Use...
switchcase.c C:\Us...
calculator.c C:\Use...
main.cpp
HITESH
launch.json
settings.json
Array.cpp
Array.exe
attachment_01_Retur...
attachment_06_Get_t...
float_hitesh.cpp
float_hitesh.exe
for_range.cpp
for_range.exe
for_range.txt
main.cpp
main2.cpp
main2.exe
pointer2.cpp
pointer2.exe
Untitled-1.cpp
Untitled-1.exe
OUTLINE
C: > Users > Sudhanshu Ranjan > Desktop > snake game > Unit_Converter.c > ...
#include<stdio.h>
int main(){
float km,m,cm,inch;
printf("Enter the distance in kilometer between the two cities : ");
scanf("%f",&km);
m = 1000 * km ;
cm = 100000 * km ;
inch = 39370 * km ;
printf(" The distance in Meter is :%f m \n The distance in centimeter is :%f cm \n The distane in inch is :%f inch\n",m,cm,inch);
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1: Code
Windows PowerShell
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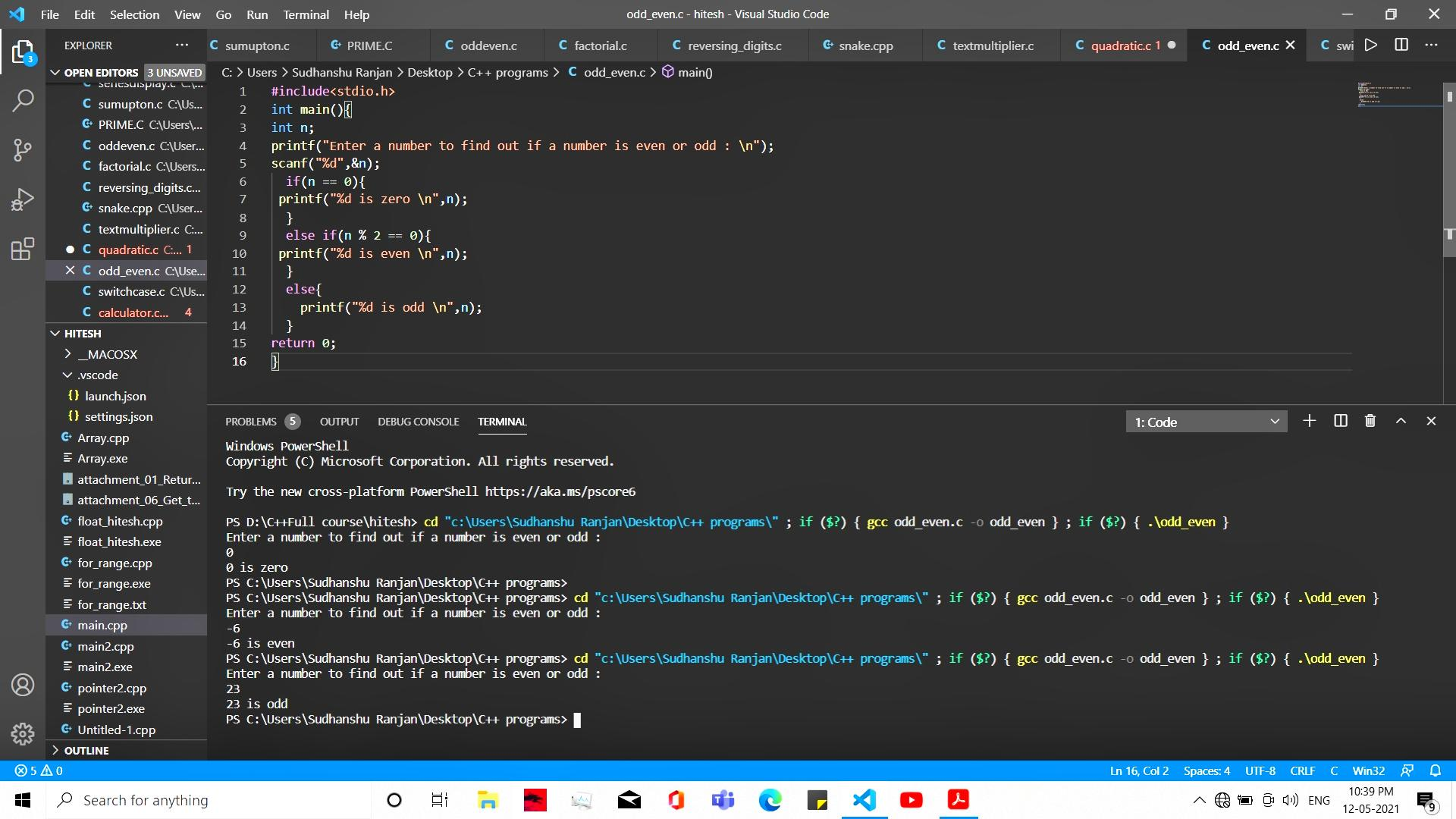
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS D:\C++Full course\hitesh> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc Unit_Converter.c -o Unit_Converter } ; if ($?) { .\Unit_Converter }
Enter the distance in kilometer between the two cities : 2
The distance in Meter is :2000.000000 m
The distance in centimeter is :200000.000000 cm
The distane in inch is :78740.000000 inch
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game>
Ln 14, Col 2 Spaces: 2 UTF-8 CRLF C Win32
Search for anything
ENG
10:23 PM
12-05-2021

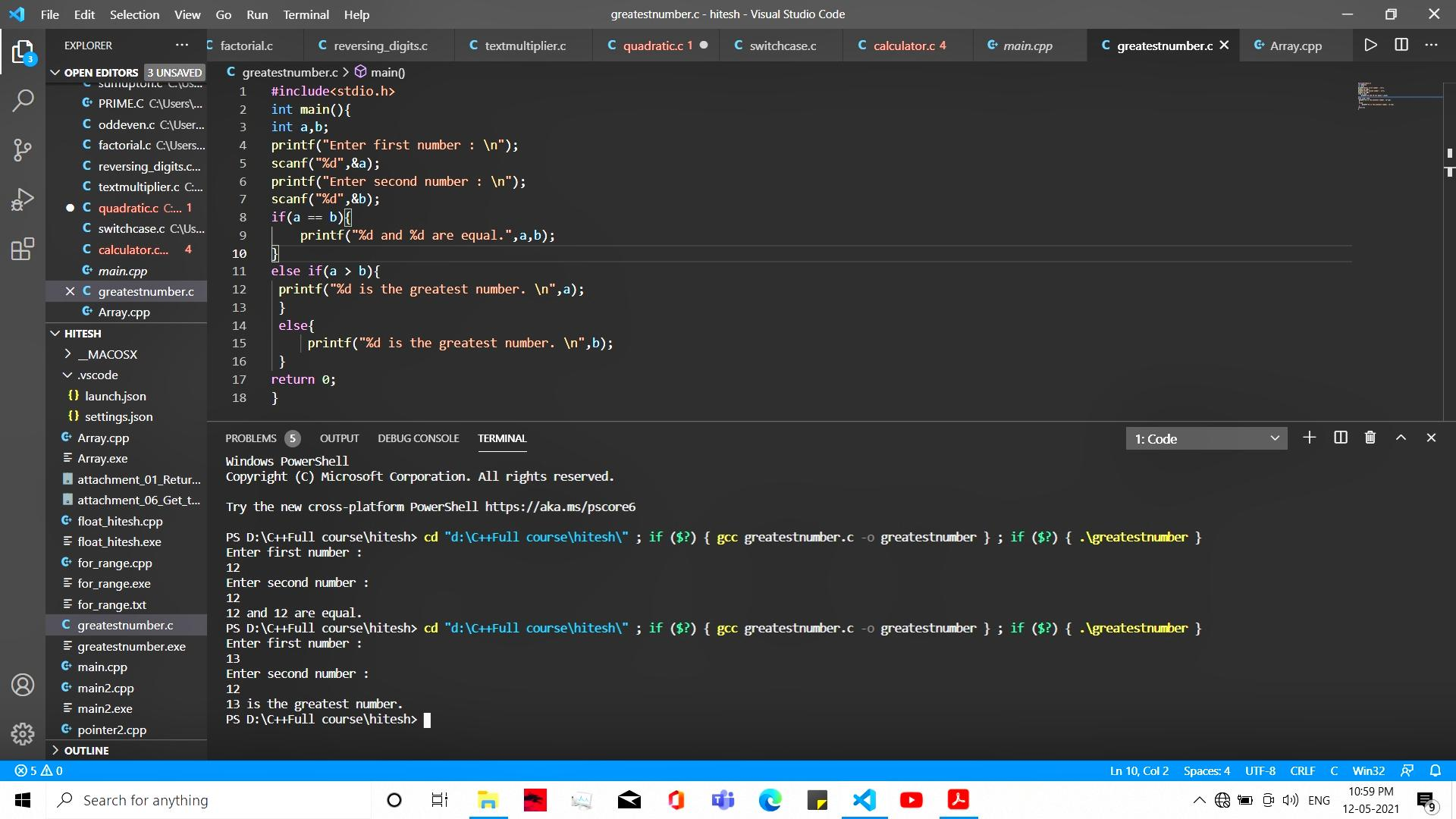
4. WAP in C to find given number is even or odd.

```
#include <stdio.h>
int main( ){
int n;
Printf ("Enter a number to find out if the number
        is even or odd : \n");
Scanf ("%d", &n);
if (n == 0) {
  Printf ("%d is zero \n", n);
    }
else if (n % 2 == 0) {
  Printf ("%d is even \n",n);
    }
else {
  Printf("%d is odd \n",n );
    }
return 0;
}
```


File Edit Selection View Go Run Terminal Help
odd_even.c - hitesh - Visual Studio Code
EXPLORER
OPEN EDITORS 3 UNSAVED
sumupton.c C:\Us...
PRIME.C C:\Users\...
oddeven.c C:\User...
factorial.c C:\Users...
reversing_digits.c...
snake.cpp C:\User...
textmultiplier.c C:...
quadratic.c C:... 1
odd_even.c C:\Use...
switchcase.c C:\Us...
calculator.c... 4
HITESH
__MACOSX
.vscode
launch.json
settings.json
Array.cpp
Array.exe
attachment_01_Retur...
attachment_06_Get_t...
float_hitesh.cpp
float_hitesh.exe
for_range.cpp
for_range.exe
for_range.txt
main.cpp
main2.cpp
main2.exe
pointer2.cpp
pointer2.exe
Untitled-1.cpp
OUTLINE
sumupton.c
PRIME.C
oddeven.c
factorial.c
reversing_digits.c
snake.cpp
textmultiplier.c
quadratic.c 1
odd_even.c
C: > Users > Sudhanshu Ranjan > Desktop > C++ programs > odd_even.c > main()
#include<stdio.h>
int main(){
int n;
printf("Enter a number to find out if a number is even or odd : \n");
scanf("%d",&n);
if(n == 0){
printf("%d is zero \n",n);
}
else if(n % 2 == 0){
printf("%d is even \n",n);
}
else{
printf("%d is odd \n",n);
}
return 0;
}
PROBLEMS 5
OUTPUT
DEBUG CONSOLE
TERMINAL
1: Code
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS D:\C++Full course\hitesh> cd "c:\Users\Sudhanshu Ranjan\Desktop\C++ programs\" ; if ($?) { gcc odd_even.c -o odd_even } ; if ($?) { .\odd_even }
Enter a number to find out if a number is even or odd :
0
0 is zero
PS C:\Users\Sudhanshu Ranjan\Desktop\C++ programs>
PS C:\Users\Sudhanshu Ranjan\Desktop\C++ programs> cd "c:\Users\Sudhanshu Ranjan\Desktop\C++ programs\" ; if ($?) { gcc odd_even.c -o odd_even } ; if ($?) { .\odd_even }
Enter a number to find out if a number is even or odd :
-6
-6 is even
PS C:\Users\Sudhanshu Ranjan\Desktop\C++ programs> cd "c:\Users\Sudhanshu Ranjan\Desktop\C++ programs\" ; if ($?) { gcc odd_even.c -o odd_even } ; if ($?) { .\odd_even }
Enter a number to find out if a number is even or odd :
23
23 is odd
PS C:\Users\Sudhanshu Ranjan\Desktop\C++ programs>
Ln 16, Col 2
Spaces: 4
UTF-8
CRLF
C
Win32
Search for anything
ENG
10:39 PM
12-05-2021

5. WAP in C to find greatest among two numbers.

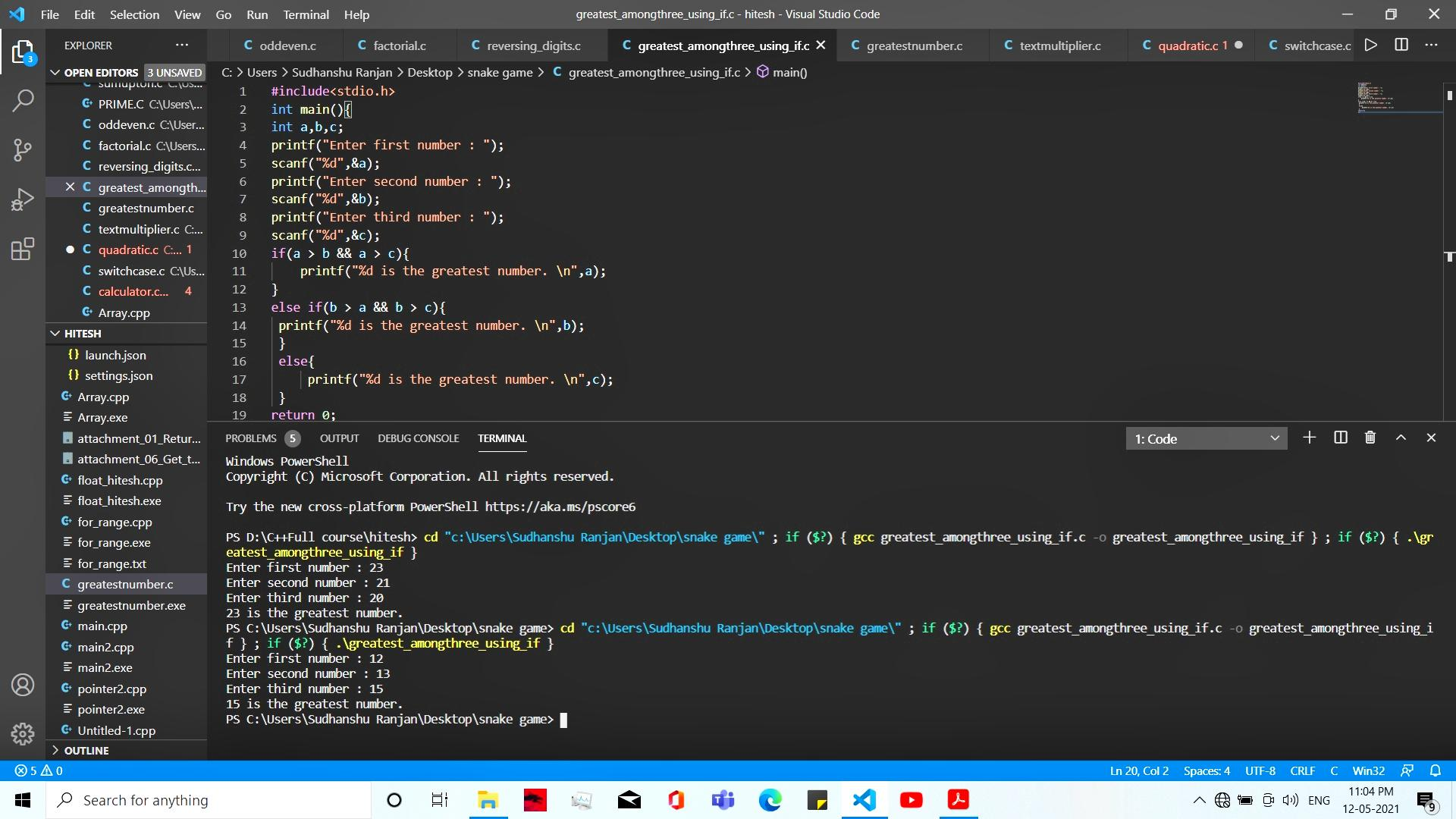
```
#include <stdio.h>
int main() {
int a,b;
Printf ("Enter first number : \n");
scanf ("%d", &a);
Printf ("Enter second number : \n");
Scanf ("%d", &b);
if (a ==b){
  Printf ("%d and %d are equal.", a,b);
  }
else if (a >b) {
  Printf("%d is the greatest number. \n",a);
    }
else {
  Printf ("%d is the greatest number. \n", b);
  }
return 0;
}
```


File Edit Selection View Go Run Terminal Help
greatestnumber.c - hitesh - Visual Studio Code
EXPLORER
factorial.c
reversing_digits.c
textmultiplier.c
quadratic.c 1
switchcase.c
calculator.c 4
main.cpp
greatestnumber.c
Array.cpp
OPEN EDITORS 3 UNSAVED
PRIME.C C:\Users\...
oddeven.c C:\User...
factorial.c C:\Users...
reversing_digits.c...
textmultiplier.c C:...
quadratic.c C:... 1
switchcase.c C:\Us...
calculator.c... 4
main.cpp
greatestnumber.c
Array.cpp
HITESH
__MACOSX
.vscode
launch.json
settings.json
Array.cpp
Array.exe
attachment_01_Retur...
attachment_06_Get_t...
float_hitesh.cpp
float_hitesh.exe
for_range.cpp
for_range.exe
for_range.txt
greatestnumber.c
greatestnumber.exe
main.cpp
main2.cpp
main2.exe
pointer2.cpp
OUTLINE
greatestnumber.c > main()
#include<stdio.h>
int main(){
int a,b;
printf("Enter first number : \n");
scanf("%d",&a);
printf("Enter second number : \n");
scanf("%d",&b);
if(a == b){
printf("%d and %d are equal.",a,b);
}
else if(a > b){
printf("%d is the greatest number. \n",a);
}
else{
printf("%d is the greatest number. \n",b);
}
return 0;
}
PROBLEMS 5
OUTPUT
DEBUG CONSOLE
TERMINAL
1: Code
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS D:\C++Full course\hitesh> cd "d:\C++Full course\hitesh\" ; if ($?) { gcc greatestnumber.c -o greatestnumber } ; if ($?) { .\greatestnumber }
Enter first number :
12
Enter second number :
12
12 and 12 are equal.
PS D:\C++Full course\hitesh> cd "d:\C++Full course\hitesh\" ; if ($?) { gcc greatestnumber.c -o greatestnumber } ; if ($?) { .\greatestnumber }
Enter first number :
13
Enter second number :
12
13 is the greatest number.
PS D:\C++Full course\hitesh>
Ln 10, Col 2
Spaces: 4
UTF-8
CRLF
C
Win32
Search for anything
ENG
10:59 PM
12-05-2021

6. WAP in C to find greatest among three numbers using if else

i)

```
#include <stdio.h>
int main() {
int a,b,c;
Printf ("Enter first number : ");
scanf ("%d",&a);
Printf ("Enter second number : ");
 scanf ("%d", &b);
Printf ("Enter third number : ");
 Scanf ("%d", &c);
if ( a>b && a>c) {
 Printf ("%d is the greatest number. \n", a);
}
else if ( b>a && b>c) {
 Printf ("%d is the greatest number. \n", b);
else {
 Printf ("% d is the greatest number. \n", c);
}
return 0;
}
```


File Edit Selection View Go Run Terminal Help
greatest_amongthree_using_if.c - hitesh - Visual Studio Code
EXPLORER
OPEN EDITORS 3 UNSAVED
PRIME.C C:\Users\...
oddeven.c C:\User...
factorial.c C:\Users...
reversing_digits.c...
greatest_amongth...
greatestnumber.c
textmultiplier.c C:...
quadratic.c C:... 1
switchcase.c C:\Us...
calculator.c... 4
Array.cpp
HITESH
launch.json
settings.json
Array.cpp
Array.exe
attachment_01_Retur...
attachment_06_Get_t...
float_hitesh.cpp
float_hitesh.exe
for_range.cpp
for_range.exe
for_range.txt
greatestnumber.c
greatestnumber.exe
main.cpp
main2.cpp
main2.exe
pointer2.cpp
pointer2.exe
Untitled-1.cpp
OUTLINE
oddeven.c
factorial.c
reversing_digits.c
greatest_amongthree_using_if.c
greatestnumber.c
textmultiplier.c
quadratic.c 1
switchcase.c
C: > Users > Sudhanshu Ranjan > Desktop > snake game > greatest_amongthree_using_if.c > main()
#include<stdio.h>
int main(){
int a,b,c;
printf("Enter first number : ");
scanf("%d",&a);
printf("Enter second number : ");
scanf("%d",&b);
printf("Enter third number : ");
scanf("%d",&c);
if(a > b && a > c){
printf("%d is the greatest number. \n",a);
}
else if(b > a && b > c){
printf("%d is the greatest number. \n",b);
}
else{
printf("%d is the greatest number. \n",c);
}
return 0;
PROBLEMS 5
OUTPUT
DEBUG CONSOLE
TERMINAL
1: Code
Windows PowerShell
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PS D:\C++Full course\hitesh> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc greatest_amongthree_using_if.c -o greatest_amongthree_using_if } ; if ($?) { .\greatest_amongthree_using_if }
Enter first number : 23
Enter second number : 21
Enter third number : 20
23 is the greatest number.
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc greatest_amongthree_using_if.c -o greatest_amongthree_using_if } ; if ($?) { .\greatest_amongthree_using_if }
Enter first number : 12
Enter second number : 13
Enter third number : 15
15 is the greatest number.
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game>
Ln 20, Col 2
Spaces: 4
UTF-8
CRLF
C
Win32
Search for anything
ENG
11:04 PM
12-05-2021

6. (ii) WAP in C to find greatest among three numbers using conditional operator.

```
#include <stdio.h>
int main (){
int a, b, c;
Printf ("Enter first numbers:");
Scanf ("%d", &a);
Printf ("Enter second number :");
 scanf ("%d", &b);
Printf ("Enter third number : ");
 scanf ("%d", &c);
(a>b && a>c) ? Printf ("%d is greatest ", a) :
   (b>c && b>a ) ? Printf ("%d is greatest", b):
     Printf ("%d is greatest", c );
return 0;
}
```

EXPLORER

OPEN EDITORS 3 UNSAVED

- PRIME.C C:\Users\...
- oddeven.c C:\User...
- factorial.c C:\Users...
- reversing_digits.c...
- greatest_amongth...
- greatest_amongth...
- greatestnumber.c
- textmultiplier.c C:...
- quadratic.c C:... 1
- switchcase.c C:\Us...
- calculator.c... 4

HITESH

- launch.json
- settings.json
- Array.cpp
- Array.exe
- attachment_01_Retur...
- attachment_06_Get_t...
- float_hitesh.cpp
- float_hitesh.exe
- for_range.cpp
- for_range.exe
- for_range.txt
- greatestnumber.c
- greatestnumber.exe
- main.cpp
- main2.cpp
- main2.exe
- pointer2.cpp
- pointer2.exe
- Untitled-1.cpp

OUTLINE

oddeven.c | factorial.c | reversing_digits.c | greatest_amongthree_using_if.c | greatest_amongthree_using_conditional.c | greatestnumber.c | textmulti

C: > Users > Sudhanshu Ranjan > Desktop > snake game > greatest_amongthree_using_conditional.c > main()

```c
#include<stdio.h>
int main(){
int a,b,c;
printf("Enter first number : ");
scanf("%d",&a);
printf("Enter second number : ");
scanf("%d",&b);
printf("Enter third number : ");
scanf("%d",&c);
(a>b && a>c)?printf("%d is greatest",a):(b>c && b>a)?printf("%d is greatest",b):printf("%d is greatest",c);
return 0;
}
```

PROBLEMS 5 | OUTPUT | DEBUG CONSOLE | TERMINAL

1: Code

```
Windows PowerShell
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PS D:\C++Full course\hitesh> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc greatest_amongthree_using_conditional.c -o greatest_amongthree_using_conditional
} ; if ($?) { .\greatest_amongthree_using_conditional }
Enter first number : 12
Enter second number : 13
Enter third number : 12
13 is greatest
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game> cd "c:\Users\Sudhanshu Ranjan\Desktop\snake game\" ; if ($?) { gcc greatest_amongthree_using_conditional.c -o greatest_amongthre
e_using_conditional } ; if ($?) { .\greatest_amongthree_using_conditional }
Enter first number : 13
Enter second number : 14
Enter third number : 16
16 is greatest
PS C:\Users\Sudhanshu Ranjan\Desktop\snake game>
```