

## Question 1

Because the range of int isn't that long. Should use long int to correct error. Or long long int

## Question 2

```
#include <stdio.h>
```

```
int main() {
```

```
    // Create integer variables to store the numbers and their sum
    int NUM1, NUM2, temp;
```

```
    // Ask the user to type the first number
    printf("Type a number 1: \n");
    scanf("%d", &NUM1);
    // Ask the user to type the second number
    printf("Type a number 2: \n");
    scanf("%d", &NUM2);
```

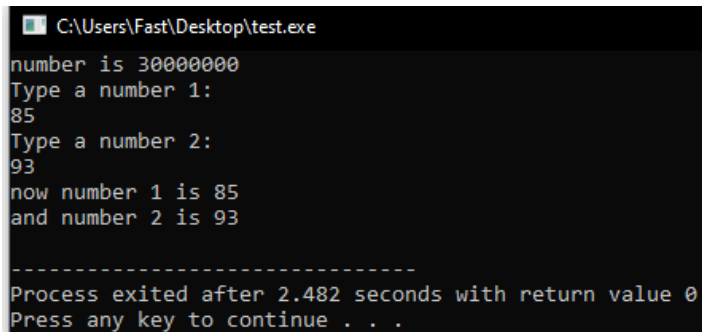
```
    //variable swap
```

```
    temp = NUM1;
    NUM1 = NUM2;
    NUM2 = temp;
```

```
    printf("now number 1 is %d\n", NUM2);
    printf("and number 2 is %d\n", NUM1);
```

```
    return 0;
```

```
}
```



```
C:\Users\Fast\Desktop\test.exe
number is 30000000
Type a number 1:
85
Type a number 2:
93
now number 1 is 85
and number 2 is 93

-----
Process exited after 2.482 seconds with return value 0
Press any key to continue . . .
```

### Question 3

```
#include <stdio.h>
#include <math.h>

int main() {
    // Ask the user to enter the student's ID, student's Name, marks for Subject 1, marks for
    // Subject 2, and marks for Subject 3.
    int sub1, sub2, sub3, stdID, i;

    printf("Enter student ID: ");
    scanf("%d", &stdID);

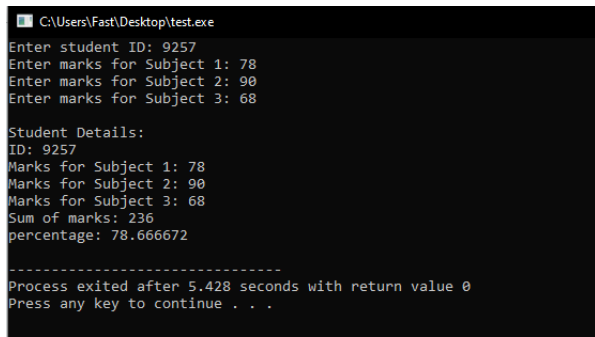
    printf("Enter marks for Subject 1: ");
    scanf("%d", &sub1);

    printf("Enter marks for Subject 2: ");
    scanf("%d", &sub2);

    printf("Enter marks for Subject 3: ");
    scanf("%d", &sub3);

    int sum;
    sum = sub1 + sub2 + sub3;
    float percentage = ((float)sum / 300) * 100;

    printf("\nStudent Details:\n");
    printf("ID: %d\n", stdID);
    printf("Marks for Subject 1: %d\n", sub1);
    printf("Marks for Subject 2: %d\n", sub2);
    printf("Marks for Subject 3: %d\n", sub3);
    printf("Sum of marks: %d\n", sum);
    printf("percentage: %f\n", percentage);
    return 0;
}
```



```
C:\Users\Fast\Desktop\test.exe
Enter student ID: 9257
Enter marks for Subject 1: 78
Enter marks for Subject 2: 90
Enter marks for Subject 3: 68

Student Details:
ID: 9257
Marks for Subject 1: 78
Marks for Subject 2: 90
Marks for Subject 3: 68
Sum of marks: 236
percentage: 78.666672

-----
Process exited after 5.428 seconds with return value 0
Press any key to continue . . .
```

```
#include <stdio.h>
```

```
int main() {  
    float hourlyPay, noOfHours, grossPay;
```

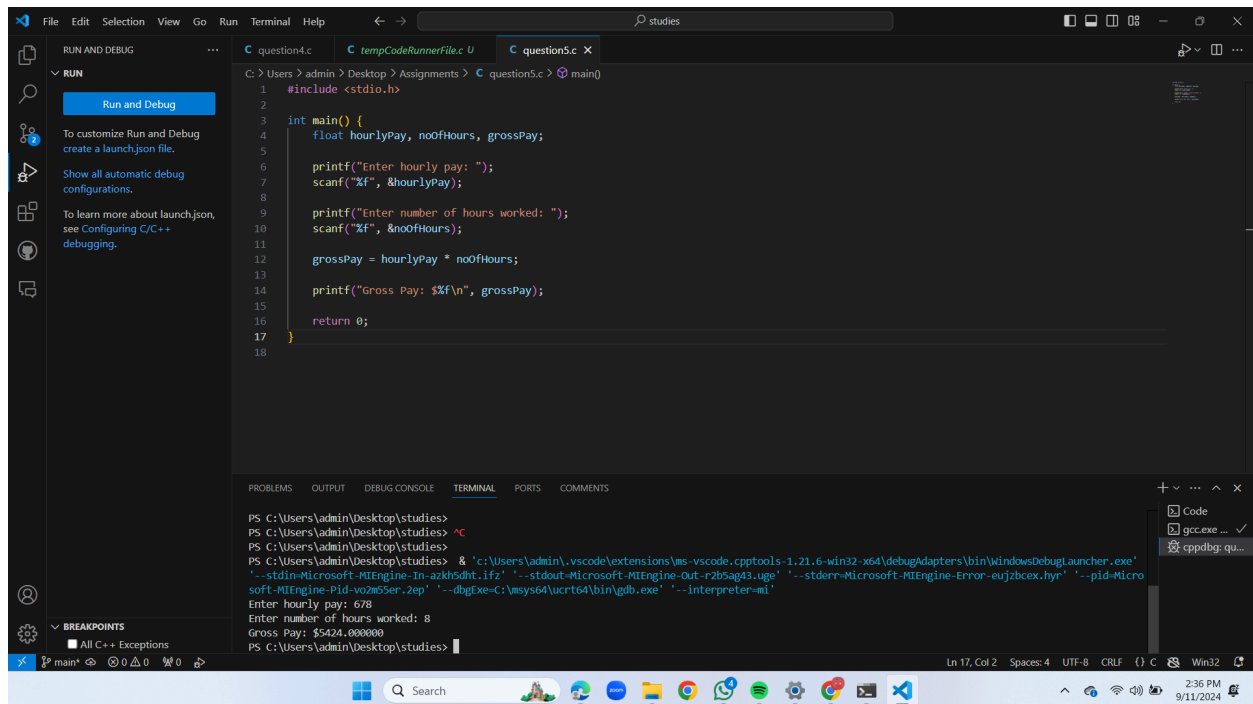
```
  
    printf("Enter hourly pay: ");  
    scanf("%f", &hourlyPay);
```

```
  
    printf("Enter number of hours worked: ");  
    scanf("%f", &noOfHours);
```

```
  
    grossPay = hourlyPay * noOfHours;
```

```
  
    printf("Gross Pay: $%.2f\n", grossPay);
```

```
  
    return 0;  
}
```



The screenshot shows the Visual Studio Code interface with a C program open in the editor. The program calculates gross pay based on hourly pay and hours worked. The terminal window shows the execution of the program, with input values 6.78 for hourly pay and 8 for hours worked, resulting in a gross pay of \$5424.000000.

```
File Edit Selection View Go Run Terminal Help  
C question4.c C tempCodeRunnerFile.c U C question5.c X  
C:\Users\admin\Desktop> Assignments > C question5.c > main()  
1 #include <stdio.h>  
2  
3 int main() {  
4     float hourlyPay, noOfHours, grossPay;  
5  
6     printf("Enter hourly pay: ");  
7     scanf("%f", &hourlyPay);  
8  
9     printf("Enter number of hours worked: ");  
10    scanf("%f", &noOfHours);  
11  
12    grossPay = hourlyPay * noOfHours;  
13  
14    printf("Gross Pay: $%.2f\n", grossPay);  
15  
16    return 0;  
17 }  
18  
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS  
PS C:\Users\admin\Desktop\studies>  
PS C:\Users\admin\Desktop\studies> ^C  
PS C:\Users\admin\Desktop\studies>  
PS C:\Users\admin\Desktop\studies> & 'c:\Users\admin\.vscode\extensions\ms-vscode.cpptools-1.21.6-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe'  
'--stdin-Microsoft-MIEngine-In-azkhsdht.ifz' '--stdout-Microsoft-MIEngine-Out-r2b5ag43.uge' '--stderr-Microsoft-MIEngine-Error-euj2bcex.hyn' '--pid-Micro  
soft-MIEngine-Pid-vozm5ser.2ep' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--interpreter=mi'  
Enter hourly pay: 6.78  
Enter number of hours worked: 8  
Gross Pay: $5424.000000  
PS C:\Users\admin\Desktop\studies>
```

```
#include <stdio.h>
```

```
int main() {
```

```
    float celsius, fahrenheit;
```

```
    printf("Enter temperature in Celsius: ");
```

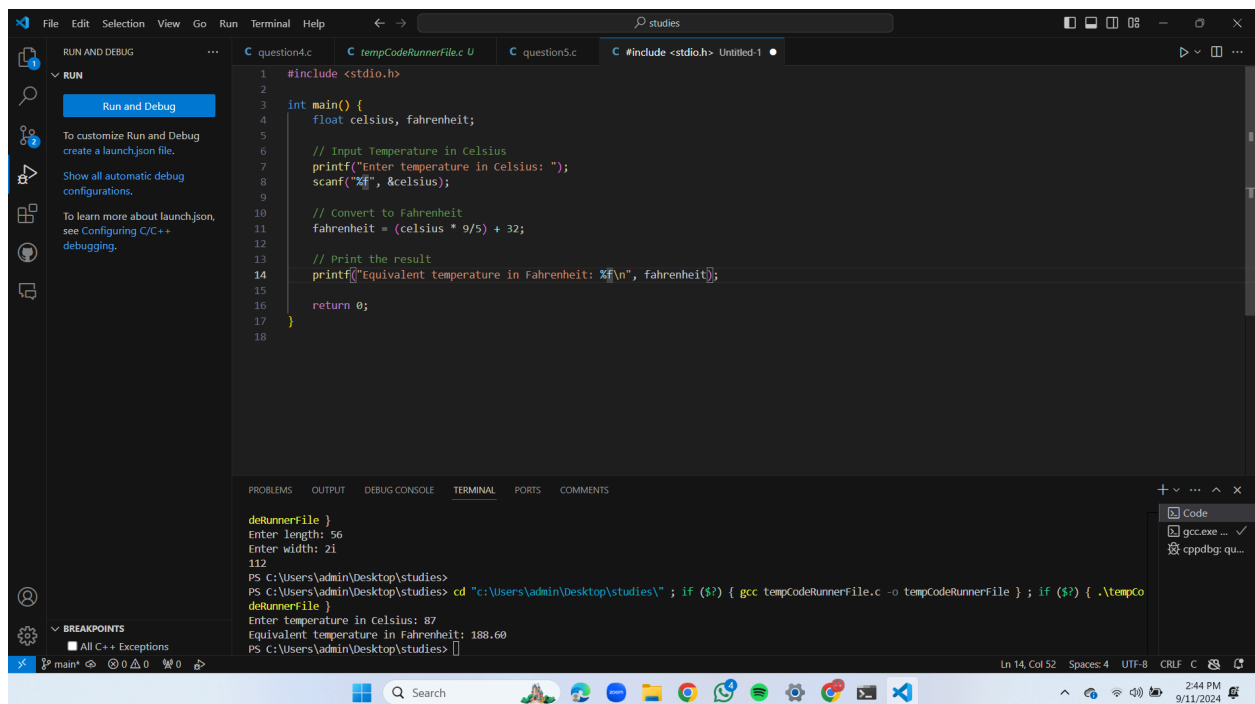
```
    scanf("%f", &celsius);
```

```
    fahrenheit = (celsius * 9/5) + 32;
```

```
    printf("Equivalent temperature in Fahrenheit: %f\n", fahrenheit);
```

```
    return 0;
```

```
}
```



```
File Edit Selection View Go Run Terminal Help
< -> studies
C question4.c C tempCodeRunnerFile.c U C question5.c C #include <stdio.h> Untitled-1
RUN
Run and Debug
To customize Run and Debug create a launch.json file.
Show all automatic debug configurations.
To learn more about launch.json, see Configuring C/C++ debugging.
1 #include <stdio.h>
2
3 int main() {
4     float celsius, fahrenheit;
5
6     // Input Temperature in Celsius
7     printf("Enter temperature in Celsius: ");
8     scanf("%f", &celsius);
9
10    // Convert to Fahrenheit
11    fahrenheit = (celsius * 9/5) + 32;
12
13    // Print the result
14    printf("Equivalent temperature in Fahrenheit: %f\n", fahrenheit);
15
16    return 0;
17
18
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
deRunnerFile }
Enter length: 56
Enter width: 21
112
PS C:\Users\admin\Desktop\studies>
PS C:\Users\admin\Desktop\studies> cd "c:\Users\admin\Desktop\studies\" ; if ($?) { gcc tempCodeRunnerFile.c -o tempCodeRunnerFile } ; if ($?) { .\tempCodeRunnerFile }
Enter temperature in Celsius: 87
Equivalent temperature in Fahrenheit: 188.60
PS C:\Users\admin\Desktop\studies>
Ln 14, Col 52 Spaces: 4 UTF-8 CRLF C 2:44 PM 9/11/2024
```