C Programming Assignment

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30 august 2025

Solutions

1. Add two numbers

```c

#include <stdio.h>

int main() {
int a, b, sum;
printf("Enter Two number: ");
scanf("%d %d", &a, &b);

sum = a + b;
printf("sum = %d\n", sum);
    return 0;
}
```

2. Subtract two numbers

```c
// subtracttwonumbers.c
#include <stdio.h>

int main() {
    int a, b, subtract;
    printf("Enter two numbers: ");
```

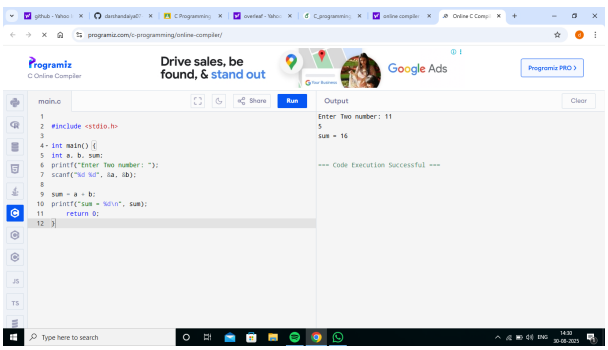


Figure 1: Enter Caption

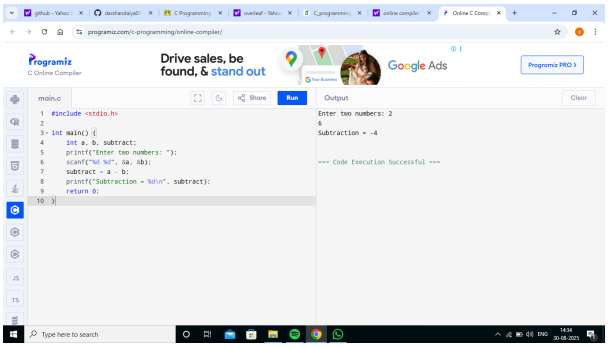


Figure 2: Enter Caption

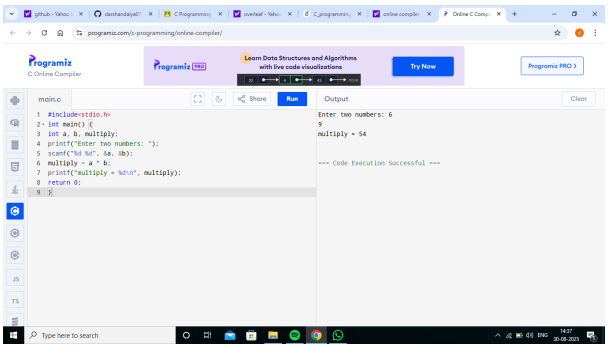


Figure 3: Enter Caption

```
    scanf("%d %d", &a, &b);
    subtract = a - b;
    printf("Subtraction = %d\n", subtract);
    return 0;
}
```

3. Multiply two numbers

```
#include<stdio.h>
int main() {
int a, b, multiply;
printf("Enter two numbers: ");
scanf("%d %d", &a, &b);
multiply = a * b;
printf("multiply = %d\n", multiply);
return 0;
}
```

4. Divide two numbers

```
#include <stdio.h>

int main() {
int a, b;
```

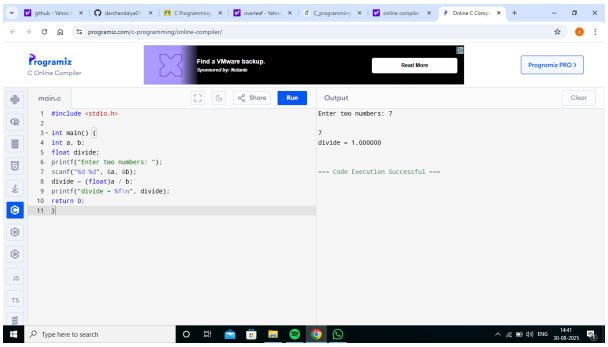


Figure 4: Enter Caption

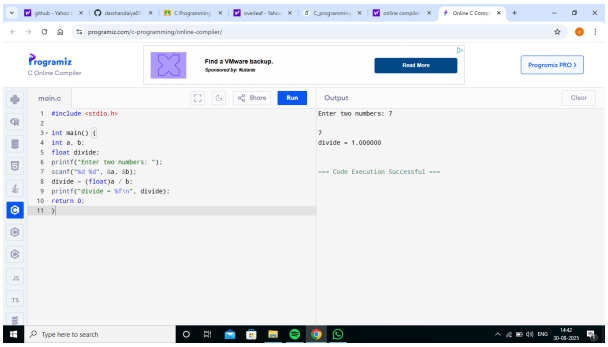
```
float divide;
printf("Enter two numbers: ");
scanf("%d %d", &a, &b);
divide = (float)a / b;
printf("divide = %f\n", divide);
return 0;
}
```

5. Perform all four operations

```
#include <stdio.h>
int main() {
int a, b, c;
int sum, minus, multiply;
float divide;
printf("Enter first number: ");
scanf("%d", &a);
printf("Enter second number: ");
scanf("%d", &b);
printf("Enter third number: ");
scanf("%d", &c);
sum = a + b + c;
minus = a - b - c;
 multiply = a * b * c;
divide = (float)a / b;
printf("Sum is: %d\n", sum);
printf("Minus is: %d\n", minus);
printf("Multiply is: %d\n", multiply);
printf("Divide (a/b) is: %f\n", divide);
return 0;
}
```

6. Convert hours into minutes

```
#include <stdio.h>
int main() {
```



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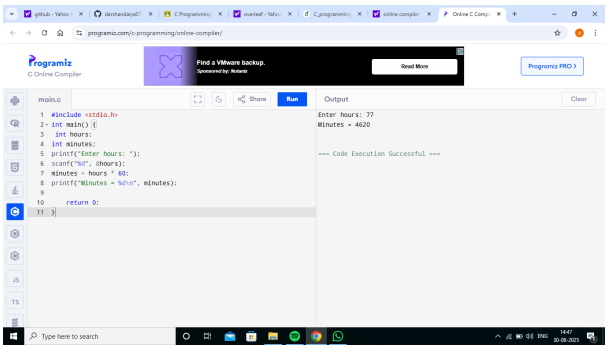


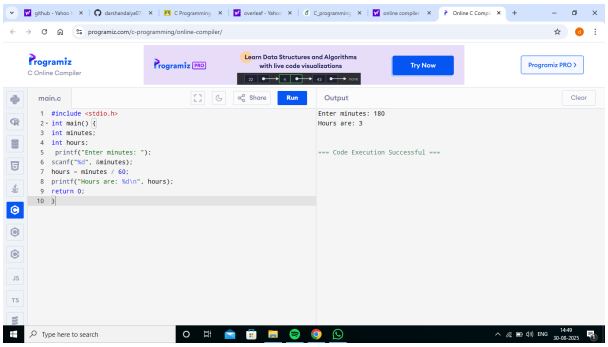
Figure 6: Enter Caption

```
 int hours;
int minutes;
printf("Enter hours: ");
scanf("%d", &hours);
minutes = hours * 60;
printf("Minutes = %d\n", minutes);

    return 0;
}
```

7. Convert minutes into hours

```
#include <stdio.h>
int main() {
int minutes;
int hours;
 printf("Enter minutes: ");
scanf("%d", &minutes);
hours = minutes / 60;
printf("Hours are: %d\n", hours);
return 0;
}
```



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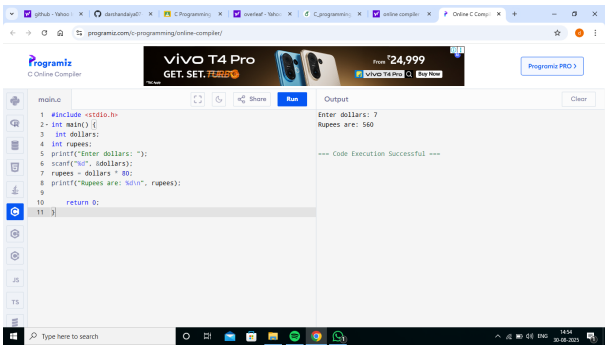


Figure 8: Enter Caption

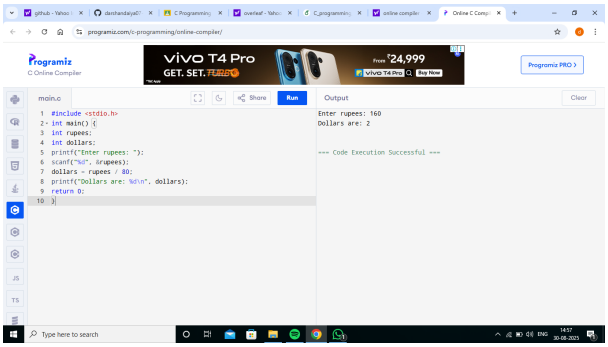
8. Convert dollars into Rs. (1$ = 80 Rs)

```c
#include <stdio.h>
int main() {
 int dollars;
int rupees;
printf("Enter dollars: ");
scanf("%d", &dollars);
rupees = dollars * 80;
printf("Rupees are: %d\n", rupees);

    return 0;
}
```

9. Convert Rs. into dollars

```c
#include <stdio.h>
int main() {
int rupees;
int dollars;
printf("Enter rupees: ");
scanf("%d", &rupees);
dollars = rupees / 80;
printf("Dollars are: %d\n", dollars);
return 0;
```



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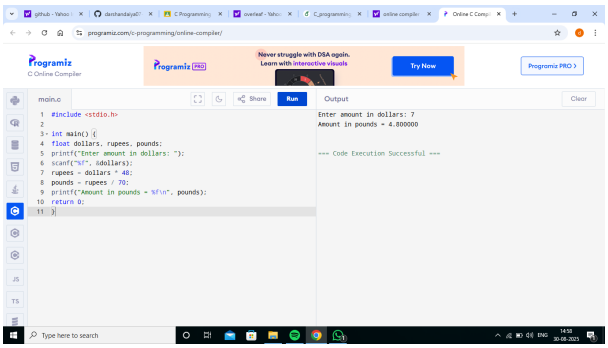


Figure 10: Enter Caption

```
}
```

10. Convert dollars into pounds (1$=48Rs, 1 pound=70Rs)

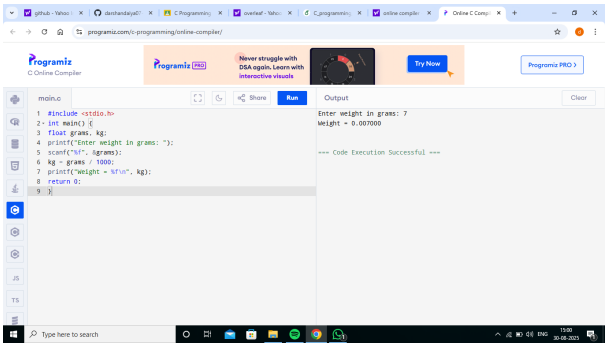
```c

#include <stdio.h>

int main() {
float dollars, rupees, pounds;
printf("Enter amount in dollars: ");
scanf("%f", &dollars);
rupees = dollars * 48;
pounds = rupees / 70;
printf("Amount in pounds = %f\n", pounds);
return 0;
}
```

11. Convert grams into kg

```c
#include <stdio.h>
int main() {
float grams, kg;
printf("Enter weight in grams: ");
scanf("%f", &grams);
```



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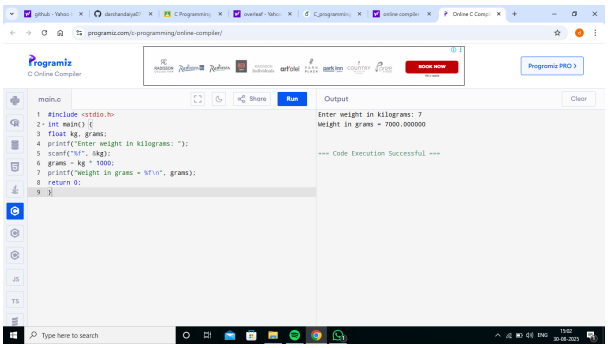


Figure 12: Enter Caption

```
kg = grams / 1000;
printf("Weight = %f\n", kg);
return 0;
}
```

12. Convert kg into grams

```
#include <stdio.h>
int main() {
float kg, grams;
printf("Enter weight in kilograms: ");
scanf("%f", &kg);
grams = kg * 1000;
printf("Weight in grams = %f\n", grams);
return 0;
}
```

13. Convert bytes into KB, MB, GB

```
#include <stdio.h>
int main() {
float bytes, kb, mb, gb;
printf("Enter size in bytes: ");
scanf("%f", &bytes);
```

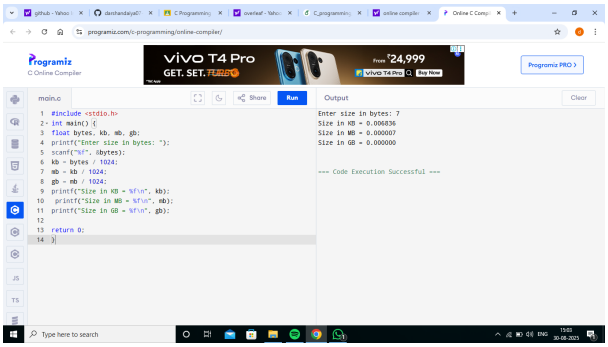


Figure 13: Enter Caption

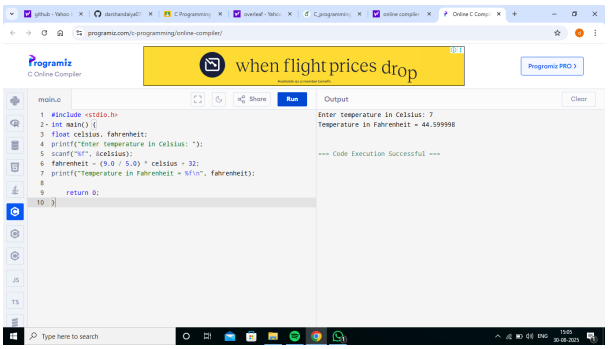


Figure 14: Enter Caption

```
kb = bytes / 1024;
mb = kb / 1024;
gb = mb / 1024;
printf("Size in KB = %f\n", kb);
 printf("Size in MB = %f\n", mb);
printf("Size in GB = %f\n", gb);

return 0;
}
```

14. Celsius to Fahrenheit

```
#include <stdio.h>
int main() {
float celsius, fahrenheit;
printf("Enter temperature in Celsius: ");
scanf("%f", &celsius);
fahrenheit = (9.0 / 5.0) * celsius + 32;
printf("Temperature in Fahrenheit = %f\n", fahrenheit);

    return 0;
}
```

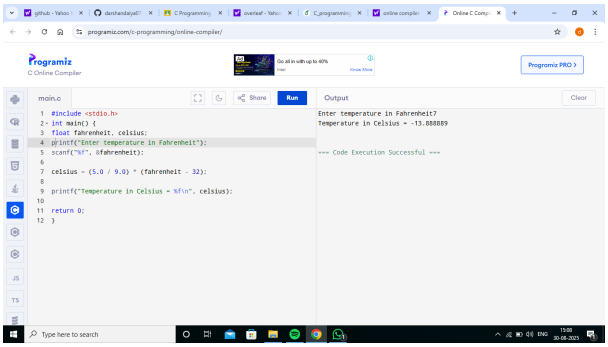


Figure 15: Enter Caption

15. Fahrenheit to Celsius

```c


#include <stdio.h>
int main() {
float fahrenheit, celsius;
printf("Enter temperature in Fahrenheit: ");
scanf("%f", &fahrenheit);

celsius = (5.0 / 9.0) * (fahrenheit - 32);

printf("Temperature in Celsius = %f\n", celsius);

return 0;
}
```

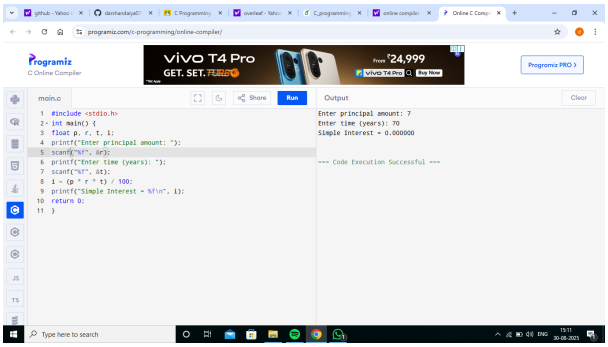
16. Calculate interest

```c

#include <stdio.h>
int main() {
float p, r, t, i;
printf("Enter principal amount: ");
scanf(scanf("%f", &r);
printf("Enter time (years): ");
scanf("%f", &t);
i = (p * r * t) / 100;
printf("Simple Interest = %f\n", i);
return 0;
}
```

17. Area & perimeter of a square

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



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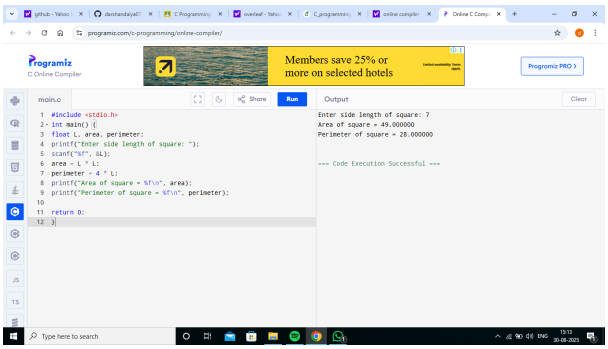


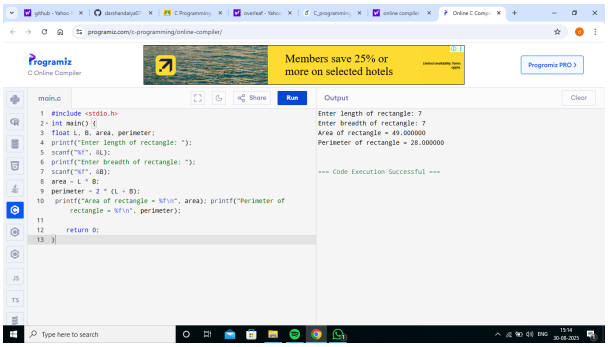
Figure 17: Enter Caption

```c
int main() {
float L, area, perimeter;
printf("Enter side length of square: ");
scanf("%f", &L);
area = L * L;
perimeter = 4 * L;
printf("Area of square = %f\n", area);
printf("Perimeter of square = %f\n", perimeter);

return 0;
}
```

18. Area & perimeter of a rectangle

```c
#include <stdio.h>
int main() {
float L, B, area, perimeter;
printf("Enter length of rectangle: ");
scanf("%f", &L);
printf("Enter breadth of rectangle: ");
scanf("%f", &B);
area = L * B;
perimeter = 2 * (L + B);
 printf("Area of rectangle = %f\n", area); printf("Perimeter of
    rectangle = %f\n", perimeter);
```



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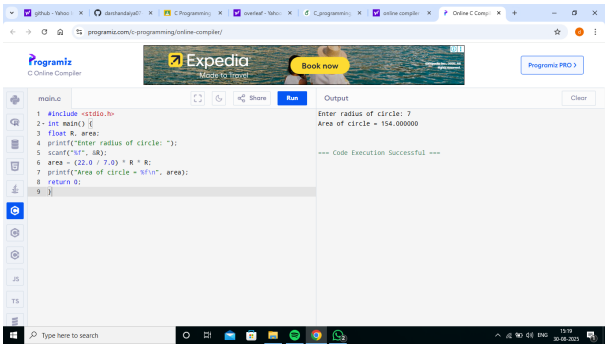

Figure 19: Enter Caption

```
11
12      return 0;
13  }
```

19. Area of a circle

```
#include <stdio.h>
int main() {
float R, area;
printf("Enter radius of circle: ");
scanf("%f", &R);
area = (22.0 / 7.0) * R * R;
printf("Area of circle = %f\n", area);
return 0;
}
```

[?]

20. Area of a triangle

```

#include <stdio.h>

int main() {
float h, l, area;
```

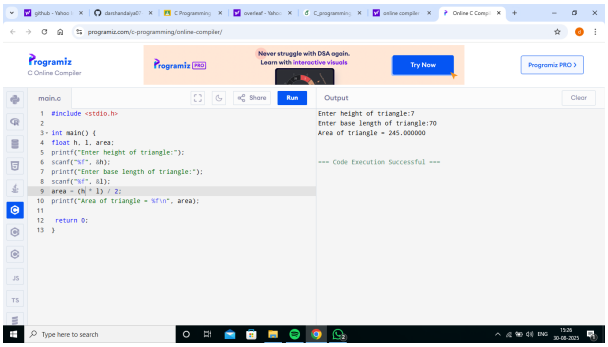

Figure 20: Enter Caption

```
printf("Enter height of triangle:");
scanf("%f", &h);
printf("Enter base length of triangle:");
scanf("%f", &l);
area = (H * L) / 2;
printf("Area of triangle = %f\n", area);

 return 0;
}
```

21. Net salary (Allowance=10%, Deduction=3%)

```

#include <stdio.h>

int main() {
float gross, allowance, deduction, net;

printf("Enter gross salary: ");
scanf("%f", &gross);

allowance = gross * 0.10;
deduction = gross * 0.03;

net = gross + allowance - deduction;

printf("Net Salary = %f\n", net);

return 0;
}
```

22. Net sales with 10% discount

```

#include <stdio.h>

```

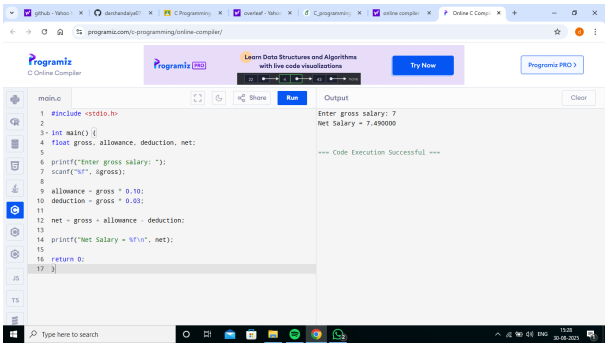

Figure 21: Enter Caption

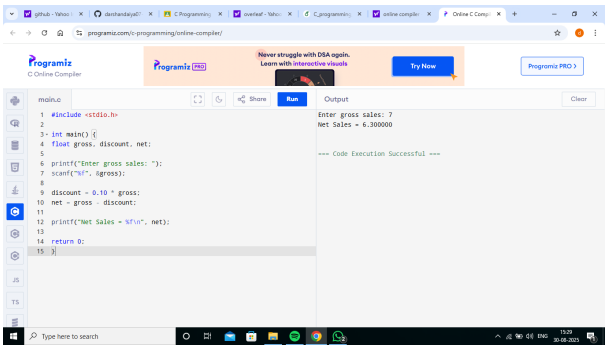

Figure 22: Enter Caption

```c
int main() {
float gross, discount, net;

printf("Enter gross sales: ");
scanf("%f", &gross);

discount = 0.10 * gross;
net = gross - discount;

printf("Net Sales = %f\n", net);

return 0;
}
```

23. Average & total of three subjects

```c

#include <stdio.h>

int main() {
float s1, s2, s3, total, average;

printf("Enter marks of subject 1: ");
scanf("%f", &s1);

```

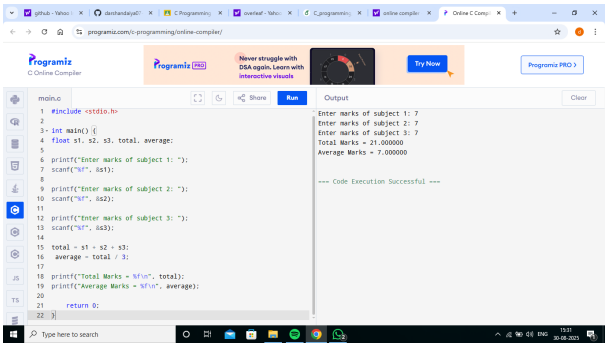

Figure 23: Enter Caption

```c
printf("Enter marks of subject 2: ");
scanf("%f", &s2);

printf("Enter marks of subject 3: ");
scanf("%f", &s3);

total = s1 + s2 + s3;
 average = total / 3;

printf("Total Marks = %f\n", total);
printf("Average Marks = %f\n", average);

    return 0;
}
```

24. Swap two values

```c

#include <stdio.h>

int main() {
int a, b, temp;

printf("Enter first number: ");
scanf("%d", &a);

printf("Enter second number: ");
scanf("%d", &b);

printf("Before swapping: a = %d, b = %d\n", a, b);

temp = a;
 a = b;
b = temp;

printf("After swapping a = %d, b = %d\n", a, b);

```

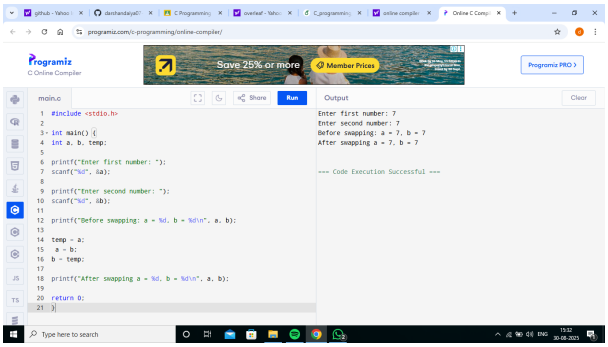

Figure 24: Enter Caption

```
21 return 0;
22 }
```