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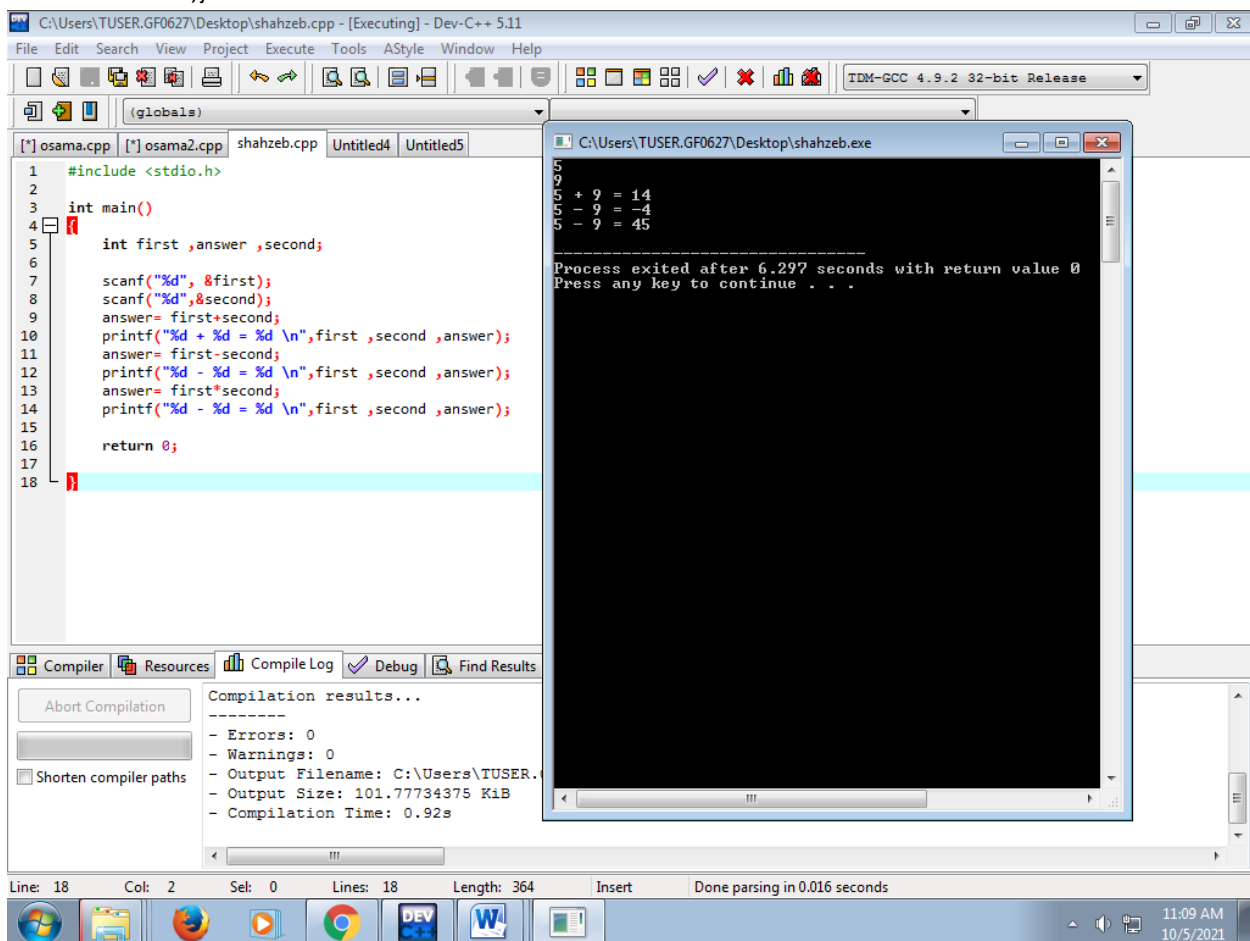
Q1

```
#include <stdio.h>

int main()
{
    int first ,answer ,second;

    scanf("%d", &first);
    scanf("%d",&second);
    answer= first+second;
    printf("%d + %d = %d \n",first ,second ,answer);
    answer= first-second;
    printf("%d - %d = %d \n",first ,second ,answer);
    answer= first*second;
    printf("%d * %d = %d \n",first ,second ,answer);

    return 0;}
```

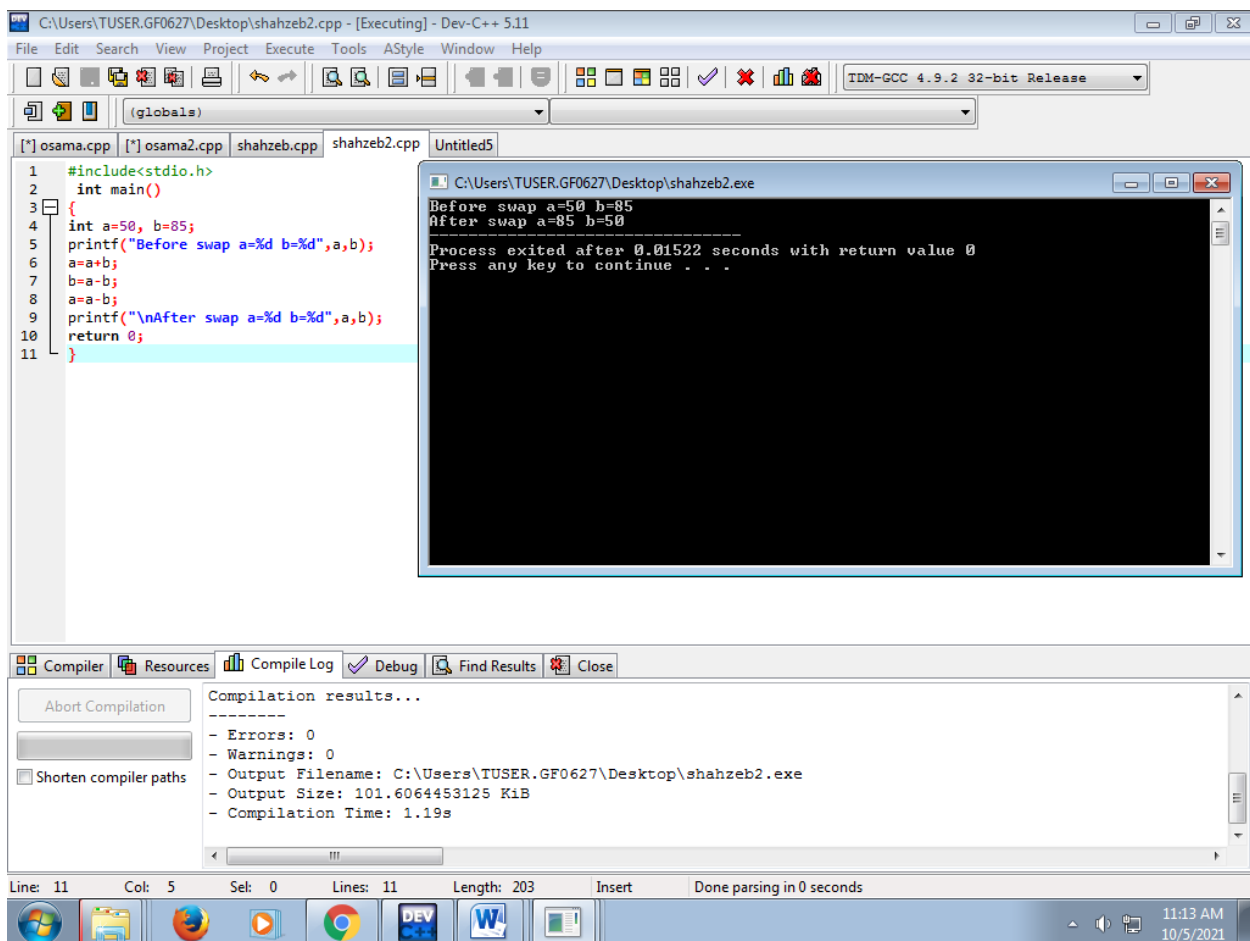


Q2

```

#include<stdio.h>
int main()
{
int a=50, b=85;
printf("Before swap a=%d b=%d",a,b);
a=a+b;
b=a-b;
a=a-b;
printf("\nAfter swap a=%d b=%d",a,b);
return 0;
}

```



Q3

```

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

```

```

int main() {
double perpendicular = 3;
double base = 4;
double hypsquare = pow(perpendicular,perpendicular) + pow(base,base);
printf("Hypotenuse is %f",sqrt(hypsquare));
double Perimeter = perpendicular+base+hypsquare;
double s = (perpendicular+base+hypsquare)/2;
double Area = sqrt(s*(s-perpendicular)*(s-base)*(s-hypsquare));

printf("\n Perimeter of Traiangle = %.2f\n", Perimeter);
printf("\n Semi Perimeter of Traiangle = %.2f\n",s);
printf("\n Area of triangle = %.2f\n",Area);

return 0;

}

```

The screenshot shows a C++ IDE with the following code in `shahzeb3.cpp`:

```

1 #include <stdio.h>
2 #include <math.h>
3 int main() {
4     double perpendicular = 3;
5     double base = 4;
6     double hypsquare = pow(perpendicular,perpendicular) + pow(base,base);
7     printf("Hypotenuse is %f",sqrt(hypsquare));
8     double Perimeter = perpendicular+base+hypsquare;
9     double s = (perpendicular+base+hypsquare)/2;
10    double Area = sqrt(s*(s-perpendicular)*(s-base)*(s-hypsquare));
11
12    printf("\n Perimeter of Traiangle = %.2f\n", Perimeter);
13    printf("\n Semi Perimeter of Traiangle = %.2f\n",s);
14    printf("\n Area of triangle = %.2f\n",Area);
15    return 0;
16 }
17
18

```

The console output shows the following results:

```

C:\Users\TUSER.GF0627\Desktop\shahzeb3.exe
Hypotenuse is 16.822604
Perimeter of Traiangle = 290.00
Semi Perimeter of Traiangle = 145.00
Area of triangle = -1.4J
-----
Process exited after 0.01598 seconds with return value 0
Press any key to continue . . . _

```

The IDE status bar at the bottom indicates: Line: 5, Col: 16, Sel: 0, Lines: 18, Length: 557, Insert, Done parsing in 0 seconds. The system clock shows 11:30 AM on 10/5/2021.

Q4

```

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

```

```

int main() {
    char op;
    double first, second ,area,perimeter;
    printf("Enter an operator (+, -, *, / ,a,b,c): \n");
    printf("Enter + for Add \n");
    printf("Enter - for Subtract \n");
    printf("Enter / for Divide \n");
    printf("Enter * for Multiply ");
    printf("Enter a for area and perimeter of Rectangle \n");
    printf("Enter b for area and perimeter of Square \n");
    printf("Enter c for area and perimeter of Triangle \n ");

    scanf("%c", &op);
    printf("Enter two operands: ");
    scanf("%lf %lf", &first, &second);

    if(op=='+'){

        printf("%.1lf + %.1lf = %.1lf", first, second, first + second);
    }

    else if(op=='-'){

        printf("%.1lf - %.1lf = %.1lf", first, second, first - second);
    }
    else if(op=='*'){

        printf("%.1lf * %.1lf = %.1lf", first, second, first * second);
    }
    else if(op=='/'){

        printf("%.1lf / %.1lf = %.1lf", first, second, first / second);
    }
    else if (op == 'a'){

        area = first * second;
        printf("Area of Rectangle : %0.4f\n", area);
        perimeter = 2*(first + second);
        printf("Perimeter of Rectangle : %0.4f\n", perimeter);
    }
    else if (op == 'b'){

        area = first * second;
        printf("Area of square : %0.4f\n", area);
    }
}

```

```

}
else if (op == 'c'){
    double perpendicular = first;
    double base =second;
    double hypsquare = pow(perpendicular,perpendicular) + pow(base,base);
    printf("Hypotenuse is %f",sqrt(hypsquare));
    double Perimeter = perpendicular+base+hypsquare;
    double s = (perpendicular+base+hypsquare)/2;
    double Area = sqrt(s*(s-perpendicular)*(s-base)*(s-hypsquare));

    printf("\n Perimeter of Traiangle = %.2f\n", Perimeter);
    printf("\n Semi Perimeter of Traiangle = %.2f\n",s);
    printf("\n Area of triangle = %.2f\n",Area);
}

else{
    printf("error");

}

}

```

