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Branch: MATHEMATICS AND COMPUTING
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```
/*
1. WAP to perform the addition of two integers and display the result. Input must be given by user.
*/
#include<stdio.h>

int main() {
    int num1, num2, sum;

    // Ask user for input
    printf("Enter 1st number: ");
    scanf("%d", &num1);

    printf("Enter 2nd number: ");
    scanf("%d", &num2);

    // Perform addition
    sum = num1 + num2;

    // Display result
    printf("Sum is %d\n", sum);
    getch();
    return 0;
}
```

Output:

Enter 1st number: 25
Enter 2nd number: 75
Sum is 100

```
/*  
2. WAP to find Fahrenheit for a given centigrade temperature.  
*/  
int main() {  
    float centigrade, fahrenheit;  
  
    // Ask user for input  
    printf("Enter the temperature in Centigrade: ");  
    scanf("%f", &centigrade);  
  
    // Convert Centigrade to Fahrenheit  
    fahrenheit = (centigrade * 9 / 5) + 32;  
  
    // Display result  
    printf("The Fahrenheit temperature is: %.2f\n", fahrenheit);  
    getch();  
    return 0;  
}
```

Output:

Enter the temperature in Centigrade: 25
The Fahrenheit temperature is: 77.00

```
/*
3. WAP to calculate area of a circle while taking radius as user input.
*/
#include<stdio.h>
#define PI 3.14159

int main() {
    float radius, area;

    // Ask user for input
    printf("Enter the radius of the circle: ");
    scanf("%f", &radius);

    // Calculate area
    area = PI * radius * radius;

    // Display result
    printf("The area is: %.2f\n", area);
    getch();
    return 0;
}
```

Output:

Enter the radius of the circle: 7
The area is: 153.94

```
/*
4. WAP to calculate area of a triangle whose base and height are user input.
*/
#include<stdio.h>

int main() {
    float base, height, area;

    // Ask user for input
    printf("Enter the height of the triangle: ");
    scanf("%f", &height);

    printf("Enter the base of the triangle: ");
    scanf("%f", &base);

    // Calculate area
    area = 0.5 * base * height;

    // Display result
    printf("The area of the triangle is: %.2f\n", area);
    getch();
    return 0;
}
```

Output:

```
Enter the height of the triangle: 7
Enter the base of the triangle: 8
The area of the triangle is: 28.00
```

```
/*  
5. Write a C program to perform swapping of two integers using a third variable.  
*/  
#include<stdio.h>  
  
int main() {  
    int num1, num2, temp;  
  
    // Ask user for input  
    printf("Enter num1: ");  
    scanf("%d", &num1);  
  
    printf("Enter num2: ");  
    scanf("%d", &num2);  
  
    // Display values before swapping  
    printf("Before Swapping num1=%d, num2=%d\n", num1, num2);  
  
    // Swapping using third variable  
    temp = num1;  
    num1 = num2;  
    num2 = temp;  
  
    // Display values after swapping  
    printf("After Swapping num1=%d, num2=%d\n", num1, num2);  
    getch();  
    return 0;  
}
```

Output:

```
Enter num1: 95  
Enter num2: 55  
Before Swapping num1=95, num2=55  
After Swapping num1=55, num2=95
```

```

/*
6. WAP to find the average mark of 5 subjects of a student and find the percentage. Assume full
mark of each subject is 200. All the input must be given by user.
*/
#include<stdio.h>

int main() {
    float sub1, sub2, sub3, sub4, sub5, average, percentage;

    // Ask user for input
    printf("Enter the number of 1st subject: ");
    scanf("%f", &sub1);

    printf("Enter the number of 2nd subject: ");
    scanf("%f", &sub2);

    printf("Enter the number of 3rd subject: ");
    scanf("%f", &sub3);

    printf("Enter the number of 4th subject: ");
    scanf("%f", &sub4);

    printf("Enter the number of 5th subject: ");
    scanf("%f", &sub5);

    // Calculate average
    average = (sub1 + sub2 + sub3 + sub4 + sub5) / 5;

    // Calculate percentage
    percentage = (average / 200) * 100;

    // Display results
    printf("The average is: %.2f\n", average);
    printf("The percentage is: %.2f%%\n", percentage);
    getch();
    return 0;
}

```

Output:

```

Enter the number of 1st subject: 95
Enter the number of 2nd subject: 99
Enter the number of 3rd subject: 150
Enter the number of 4th subject: 176
Enter the number of 5th subject: 195
The average is: 143.00
The percentage is: 71.50%

```