print-prac.txt

```c
// File: tuition-c/APC-PRAC-001.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-001.c

/* WAP to calculate area and perimeter of a rectangle
by accepting length and breadth as input. */
// Author - Amit Dutta, Date - 18th SEP, 2025

#include<stdio.h>
int main() {
    double length, breadth, area, perimeter;
    printf("Enter the length and breadth of the Rectangle : ");
    scanf("%lf %lf", &length, &breadth);
    area = length * breadth;
    perimeter = 2 * (length + breadth);
    printf("\nArea of the Rectangle : %g"
            "\nPerimeter of the Rectangle : %g", area, perimeter);
    return 0;

}


/* --- End of tuition-c/APC-PRAC-001.c --- */

// File: tuition-c/APC-PRAC-002.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-002.c

/* WAP to calculate area of a circle using math library
method. Take radius of the circle as input. */
/* Author - Amit Dutta, Date - 18th SEP, 2025 */

#include <stdio.h>
#include <math.h>
int main()
{
    double r, area;
    printf("Enter the radius of the circle : ");
    scanf("%lf", &r);
    area = M_PI * pow(r, 2);
    printf("\nArea of the circle : %g", area);
    return 0;
}
/* --- End of tuition-c/APC-PRAC-002.c --- */

// File: tuition-c/APC-PRAC-003.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-003.c

/* WAP to accept  diagonal of a square and calculate area, parimeter */
/* Author - Amit Dutta, Date - 18th SEP, 2025 */

#include <stdio.h>
#include <math.h>
int main()
{
    double dia, side, area, peri;
    printf("Enter the diagonal of the square : ");
    scanf("%lf", &dia);
    side = dia / sqrt(2);
    area = pow(side, 2);
```

```c
        peri = 4 * side;
        printf("\nArea of the square      : %g"
               "\nPerimeter of the square : %g",
               area, peri);
        return 0;
}
/* --- End of tuition-c/APC-PRAC-003.c --- */

// File: tuition-c/APC-PRAC-004.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-004.c

/* WAP to calculate and display radius of a circle by taking the area as input. */
/* Author - Amit Dutta, Date - 18th SEP, 2025 */

#include <stdio.h>
#include <math.h>
int main()
{
        double r, area;
        printf("Enter the area of the circle : ");
        scanf("%lf", &area);
        r = sqrt(area / M_PI);
        printf("\nRadius of the circle : %g", r);
        return 0;
}
/* --- End of tuition-c/APC-PRAC-004.c --- */

// File: tuition-c/APC-PRAC-005.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-005.c

/* WAP a program that accept number of days
as input and represent it as years, months and days. */
/* Author - Amit Dutta, Date - 19th SEP, 2025 */

#include <stdio.h>
int main()
{
        int days, months, years, temp;
        printf("Enter the No. of days : ");
        scanf("%d", &days);
        temp = days;
        years = days / 365;
        days = days % 365;
        months = days / 30;
        days = days % 30;
        printf("%d Days = %d Years, %d Months, %d Days", temp, years, months, days);
        return 0;
}
/* --- End of tuition-c/APC-PRAC-005.c --- */

// File: tuition-c/APC-PRAC-006.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-006.c

/* WAP that accept seconds as input and represent it an hours, minutes and seconds. */
/* Author - Amit Dutta, Date - 19th SEP, 2025 */

#include <stdio.h>
int main()
{
        int sec, hours, minutes, temp;
        printf("Enter the no of seconds : ");
```

```c
    scanf("%d", &sec);
    temp = sec;
    hours = sec / 3600;
    sec = sec % 3600;
    minutes = sec / 60;
    sec = sec % 60;
    printf("\n%d Seconds = %d Hours, %d Minutes, %d Seconds.", temp, hours, minutes, sec);
    return 0;
}
/* --- End of tuition-c/APC-PRAC-006.c --- */


// File: tuition-c/APC-PRAC-007.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-007.c


/* WAP that accept basic salary of an employee and display gross salary,
net salary generated by below formula.
    DA = 25% of the basic salary.
    HRA = 12.5% of the basic salary.
    PF = 10% of the basic salary.
    gross salary = basic salary + da + hra
    net salary = gross salary - pf
*/
/* Author - Amit Dutta, Date - 19th SEP, 2025 */

#include <stdio.h>
int main()
{
    double bs, gs, ns, da, hra, pf;
    printf("Enter the basic salary of the employee : ");
    scanf("%lf", &bs);
    da = bs * 0.25;
    hra = bs * 0.125;
    pf = bs * 0.10;
    gs = bs + da + hra;
    ns = gs - pf;
    printf("\nGross Salary : %g"
           "\nNet Salary   : %g",
           gs, ns);
    return 0;
}
/* --- End of tuition-c/APC-PRAC-007.c --- */


// File: tuition-c/APC-PRAC-008.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-008.c


/* WAP to multiply and divide a number by 4 without
using multiplication and division operator. */
/* Author - Amit Dutta, Date - 19th SEP, 2025 */

#include <stdio.h>
int main()
{
    int num, multi, div;
    printf("Enter the number : ");
    scanf("%d", &num);
    multi = num << 2;
    div = num >> 2;
    printf("Multiplication : %d"
           "\nDivision : %d",
           multi, div);
    return 0;
```

```
}
/* --- End of tuition-c/APC-PRAC-008.c --- */


// File: tuition-c/APC-PRAC-009.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-009.c


/* WAP to swap two integer variable without using Third variable. */
/* Author - Amit Dutta, Date - 19th SEP, 2025 */


#include <stdio.h>
int main()
{
    int a = 4, b = 6;
    printf("Before swap : A = %d and B = %d", a, b);
    a = a ^ b;
    b = a ^ b;
    a = a ^ b;
    printf("\nAfter swap  : A = %d and B = %d", a, b);
    return 0;
}
/* --- End of tuition-c/APC-PRAC-009.c --- */


// File: tuition-c/APC-PRAC-010.c
// URL: https://github.com/notamitgamer/bsc/blob/main/tuition-c/APC-PRAC-010.c


/* WAP to calculate and display the valve of the given expression :
 (1/a^3) + (1/(b+2)^3) + (1/(c^4 + root(2)))
 take a, b, c as input.
*/
/* Author - Amit Dutta, Date - 19th SEP, 2025 */


#include <stdio.h>
#include <math.h>
int main()
{
    double a, b, c, result;
    printf("Enter the value for a, b and c : ");
    scanf("%lf %lf %lf", &a, &b, &c);
    result = (1 / pow(a, 3)) + (1 / pow((b + 2), 3)) + (1 / (pow(c, 4) + sqrt(2)));
    printf("\nResult = %g", result);
    return 0;
}
/* --- End of tuition-c/APC-PRAC-010.c --- */
```