**Homework Assignment**

1. Write a simple program to convert a student weight from kilograms to pounds. Declare two variables Kg and Pound. Initialize the variable Kg with a value 70 and output the converted weight in Pounds by using formula Pound = Kg \* 2.2

#include <stdio.h>

int main()

{

float Kg = 70, Pound;

Pound = Kg \* 2.2;

printf("%.2f kg weight = %.2f pounds weight\n", Kg, Pound);

system("pause");

return 0;

}

1. Find the area of a rectangle. Declare and initialize two variables length and width such that length = 20 and width = 30. Output the area of rectangle using formula area = length \* width.

#include <stdio.h>

int main()

{

int length = 20, width = 30;

int area = length \* width;

printf("Area = %d\n", area);

system("pause");

return 0;

}

1. Write a program that asks the user to type 2 integers A and B and exchange the value of A and B.

[Hint: be sure to use integer values throughout, not floating point numbers. Moreover, you should create a third temporary variable to complete the exchange.]

#include <stdio.h>

int main()

{

int a = 20, b = 30, temp;

printf("Before exchange..\n");

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

temp = a;

a = b;

b = temp;

printf("After exchange..\n");

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

system("pause");

return 0;

}

1. Write a program that will calculate and print the salary of a worker for a particular month. The salary of a worker depends on his basic salary plus the overtime. The formula to be used is:

total\_salary = basic\_salary + (hours\_overtime \* rate\_per\_hour)

where basic\_salary is a fix salary received by an employee every month, hours\_overtime is the number of extra hours the employee has worked for that particular month, and the rate\_per\_hour refers to the rate the employee is entitled to for his overtime.

#include <stdio.h>

int main()

{

float basic\_salary, hours\_ot, rate\_per\_hour, total\_salary;

printf("Enter basic salary : ");

scanf("%f", &basic\_salary);

printf("Enter hours worked over time : ");

scanf("%f", &hours\_ot);

printf("Enter rate per hour : ");

scanf("%f", &rate\_per\_hour);

total\_salary = basic\_salary + ( hours\_ot \* rate\_per\_hour);

printf("Total salary = %.2f\n", total\_salary);

system("pause");

return 0;

}

1. Input the monthly income of a person. Calculate his monthly saving after giving share to each of his family member as follows,

* Son gets 10 %
* Daughter gets 5 %
* Wife gets 12 %
* Monthly expenditure 20 %

#include <stdio.h>

int main()

{

float monthly\_salary, saving;

printf("Enter monthly income : ");

scanf("%f", &monthly\_salary);

saving = monthly\_salary - monthly\_salary \* 0.1 - monthly\_salary \* 0.05 - monthly\_salary \* 0.12 - monthly\_salary \* 0.2;

printf("Savings are : %f", saving);

system("pause");

return 0;

}