

-----Given Programming tasks-----

1.

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

```
void calculateDiscount(float originalPrice, float discountPercentage){
```

```
    float f_p;
```

```
    f_p=originalPrice-((originalPrice*discountPercentage)/100);
```

```
    printf("the price after the discount = %.2f",f_p);
```

```
}
```

```
int main(){
```

```
    float o_g;
```

```
    int d_p;
```

```
    printf("enter the orginal_price");
```

```
    scanf("%f",&o_g);
```

```
    printf("Enter the discount percentage");
```

```
    scanf("%d",&d_p);
```

```
    calculateDiscount(o_g,d_p);
```

```
    return 0;
```

```
}
```

2.

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

```
int updateInventory(int,int);
```

```
int updateInventory(int currentCount, int changeQuantity){
```

```
    int n=currentCount,user_input;
```

```
    printf("Enter '1' to add or '2' to remove quantity :");
```

```
    scanf("%d",&user_input);
```

```
    if(user_input==1){
```

```

        n+=changeQuantity;
        printf("the current quantity after update is %d",n);
    }else if(user_input==2){
        n-=changeQuantity;
        printf("the current quantity after update is %d",n);
    }

}

int main()
{
    int current_count,count_to_add;
    printf("enter the current count of product");
    scanf("%d",&current_count);
    printf("enter the quality to update");
    scanf("%d",&count_to_add);
    updateInventory(current_count,count_to_add);
    return 0;
}

```

3.

```

#include <stdio.h>

float calculateTotalPrice(float itemPrice, float taxRate) {
    float taxAmount = itemPrice * (taxRate / 100);
    float totalPrice = itemPrice + taxAmount;
    return totalPrice;
}

```

```

int main() {
    float price, taxRate;
    printf("Enter the price of the item: ");
    scanf("%f", &price);
    printf("Enter the sales tax rate (in percentage): ");
    scanf("%f", &taxRate);
    float total = calculateTotalPrice(price, taxRate);
    printf("The total price after tax is: %.2f\n", total);

    return 0;
}

```

4.

```

#include<stdio.h>

int calculateLoyaltyPoints(float);
int calculateLoyaltyPoints(float amountSpent){
    int amount=amountSpent;
    int reward_points=amount/10;
    printf("You got %d reward_points !",reward_points);
}

```

```

int main(){
    float amount_spend;
    printf("Enter the amount spend by user :");
    scanf("%f",&amount_spend);
    calculateLoyaltyPoints(amount_spend);
}

```

6.

```

#include<stdio.h>

float calculateRefund(float,float);

float calculateRefund(float itemPrice, float refundPercentage){
    float o_g=itemPrice;
    float refund_price=o_g*(refundPercentage/100);
    return refund_price;
}

int main(){
    float itemprice,refundPercentage;
    printf("enter the price of item :");
    scanf("%f",&itemprice);
    printf("enter the refundPercentage :");
    scanf("%f",&refundPercentage);
    float result=calculateRefund(itemprice,refundPercentage);
    printf("The Price after refund is : %f",result);
}

```

5.

```

#include<stdio.h>

float calculateOrderTotal(float*,int);

float calculateOrderTotal(float prices[],int numberOfItems){
    float total_cost=0;
    for(int i=0;i<numberOfItems;i++){
        total_cost+=prices[i];
    }
    return total_cost;
}

int main(){
    int n;

```

```

float arr[n];

printf("enter the number of items :");

scanf("%d",&n);

for(int i=0;i<n;i++){

    printf("Enter the price for %d item :",i+1);

    scanf("%f",&arr[i]);

}

float result=calculateOrderTotal(arr,n);

printf("The total order cost is = %.2f",result);

return 0;

}

```

7.

```

#include<stdio.h>

float calculateShippingCost(float);

float calculateShippingCost(float weight){

    float w=weight;

    int rate;

    if(w>0 && w<=5){

        rate=5;

    }else if(w>5 && w<=10){

        rate=10;

    }else{

        return -1;

    }

    return rate;

}

int main(){

    float weight;

```

```

printf("enter the weight of luggage :");
scanf("%f",&weight);
int result=calculateShippingCost(weight);
printf("The shipping cost for your luggage is = %d",result);
return 0;
}

```

8.

```

#include <stdio.h>

float convertCurrency(float amount, float exchangeRate) {
    float convertedAmount = amount * exchangeRate;

    return convertedAmount;
}

int main() {
    float amount, exchangeRate;
    printf("Enter the amount in the original currency: ");
    scanf("%f", &amount);
    printf("Enter the exchange rate: ");
    scanf("%f", &exchangeRate);
    float converted = convertCurrency(amount, exchangeRate);
    printf("The converted amount is: %.2f\n", converted);

    return 0;
}

```

9.

```

#include <stdio.h>

```

```

float findLowerPrice(float priceA, float priceB) {
    if (priceA < priceB) {
        return priceA;
    } else {
        return priceB;
    }
}

```

```

int main() {
    float priceA, priceB;
    printf("Enter the price from Vendor A: ");
    scanf("%f", &priceA);

    printf("Enter the price from Vendor B: ");
    scanf("%f", &priceB);
    float lowerPrice = findLowerPrice(priceA, priceB);
    printf("The lower price is: %.2f\n", lowerPrice);
    return 0;
}

```

10.

```

#include <stdio.h>
#include <stdbool.h>

bool isEligibleForSeniorDiscount(int age) {
    if (age >= 65) {
        return true;
    } else {
        return false;
    }
}

```

```
}  
  
int main() {  
    int age;  
    printf("Enter the customer's age: ");  
    scanf("%d", &age);  
    if (isEligibleForSeniorDiscount(age)) {  
        printf("The customer is eligible for a senior citizen discount.\n");  
    } else {  
        printf("The customer is not eligible for a senior citizen discount.\n");  
    }  
  
    return 0;  
}
```