PF-LAB-4

1

```c
#include <stdio.h>
int main() {
    int num1;
    printf("Enter a number:");
    scanf("%d",&num1);
    if (num1%3 ) {
        printf("This number is not multiple of 3");
    } else printf("This number is a amultiple of 3");
    return 0;
}
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

C:\Users\k241020\Desktop\ASSIGNMENT>gcc 1.c -o 1.exe

C:\Users\k241020\Desktop\ASSIGNMENT>1.exe
Enter a number:15
This number is a amultiple of 3
C:\Users\k241020\Desktop\ASSIGNMENT>
```

```c
C 2.c
1    #include <stdio.h>
2  v int main() {
3        int num1, num2;
4        char operator;
5        float result;
6        printf("Enter number 1:");
7        scanf("%d", &num1);
8        printf("\nEnter number 2:");
9        scanf("%d", &num2);
10       printf("\nEnter the operator(+,-,*,/): ");
11       scanf(" %c", &operator);
12 v     switch(operator) {
13           case '+':
14           result = num1 + num2;
15           printf("Resultant is %.2f", result);
16           break;
17           case '-':
18           result = num1 - num2;
19           printf("Resultant is %.2f", result);
20           break;
21           case '*':
22           result = num1 * num2;
23           printf("Resultant is %.2f", result);
24           break;
25 v         case '/':
26 v           if (num2 != 0) {
27                printf("Resultant is %.2f", result);
28             } else printf("ERROR: Denominator is 0");
29             break;
30           default: printf("Invalid Operator!");
31       }
32       return 0;
33
34 }
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


C:\Users\k241020\Desktop\ASSIGNMENT>gcc 2.c -o 2.exe

C:\Users\k241020\Desktop\ASSIGNMENT>2.exe
Enter number 1:12

Enter number 2:7

Enter the operator(+,-,*,/): -
Resultant is 5.00
C:\Users\k241020\Desktop\ASSIGNMENT>
```

3

```c
C 3.c > ⊙ main()
1    #include <stdio.h>
2    int main() {
3        char ch;
4        printf("Enter a character: ");
5        scanf("%c", &ch);
6        if(ch >= 'a' && ch <= 'z') {
7            printf(" %c is a lowercase alphabet.\n", ch);
8        }
9        else if(ch >= 'A' && ch <= 'Z') {
10           printf(" %c is a uppercase letter.\n", ch);
11       }
12       else if(ch >= '0' && ch <= '9') {
13           printf(" %c is a digit.\n", ch);
14       }
15       else {
16           printf(" %c is a special character.", ch);
17       }
18       return 0;
19   }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>gcc 3.c -o 3.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>3.exe
Enter a character: 4
 4 is a number.

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>3.exe
Enter a character: p
 p is a lowercase alphabet.
 p is a lowercase alphabet.
 p is a lowercase alphabet.
 p is a lowercase alphabet.
 p is a lowercase alphabet.
 p is a lowercase alphabet.

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>3.exe
Enter a character: W
 W is a uppercase letter.

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>3.exe
Enter a character: $
 $ is a special character.
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>
```

4

```c
C 4.c > ⦿ main()
1    #include <stdio.h>
2    int main() {
3        int itemsCost, discount, discountedCost, savedCost;
4        printf("Enter Total Cost Of Items: ");
5        scanf("%d", &itemsCost);
6        if (itemsCost < 500) {
7            printf("NO DISCOUNT!");
8            printf("\nYour Total Cost:%d", itemsCost);
9        }
10       else if (itemsCost < 2000) {
11           discount =  itemsCost * 0.05;
12           discountedCost = itemsCost - discount;
13           printf("YOU AVAILED THE DISCOUNT!");
14           printf("\nYour Total Cost: %d", itemsCost);
15           printf("\nDiscount: %d", discount);
16           printf("\nTotal Cost After Discount: %d", discountedCost);
17       }
18       else if (itemsCost >= 2000 || itemsCost <= 4000) {
19           discount =  itemsCost * 0.1;
20           discountedCost = itemsCost - discount;
21           printf("YOU AVAILED THE DISCOUNT!");
22           printf("\nYour Total Cost: %d", itemsCost);
23           printf("\nDiscount: %d", discount);
24           printf("\nTotal Cost After Discount: %d", discountedCost);
25       }
26       else if (itemsCost > 4000 || itemsCost <= 6000) {
27           discount =  itemsCost * 0.2;
28           discountedCost = itemsCost - discount;
29           printf("YOU AVAILED THE DISCOUNT!");
30           printf("\nYour Total Cost: %d", itemsCost);
31           printf("\nDiscount: %d", discount);
32           printf("\nTotal Cost After Discount: %d", discountedCost);
33       }
34        else if (itemsCost > 6000) {
35           discount =  itemsCost * 0.35;
36           discountedCost = itemsCost - discount;
37           printf("YOU AVAILED THE DISCOUNT!");
38           printf("\nYour Total Cost: %d", itemsCost);
39           printf("\nDiscount: %d", discount);
40           printf("\nTotal Cost After Discount: %d", discountedCost);
41       }
42       return 0;
43
44   }
```

```
OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>gcc 4.c -o 4.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>4.exe
Enter Total Cost Of Items: 450
NO DISCOUNT!
Your Total Cost:450
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>4.exe
Enter Total Cost Of Items: 2400
YOU AVAILED THE DISCOUNT!
Your Total Cost: 2400
Discount: 240
Total Cost After Discount: 2160
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>4.exe
Enter Total Cost Of Items: 6400
YOU AVAILED THE DISCOUNT!
Your Total Cost: 6400
Discount: 640
Total Cost After Discount: 5760
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>
```

5

```
OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>gcc 5.c -o 5.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>5.exe
Enter your ID: 1001
Enter your name: JAMES
Enter Units Consumed: 800
Customer ID: 1001
Customer Name: JAMES
Units Consumed: 800
Subcharges: 4308.00
Total Amount to Pay: 33028.00
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>
```

```c
C  5.c > ⊗ main()
  1    #include <stdio.h>
  2    int main() {
  3        int units, customerID;
  4        char name[50];
  5        float chargesPerUnit, totalAmount, subcharges, subChargedAmount;
  6        printf("Enter your ID: ");
  7        scanf("%d", &customerID);
  8        printf("Enter your name: ");
  9        scanf("%s", name);
 10        printf("Enter Units Consumed: ");
 11        scanf("%d", &units);
 12        if(units < 200) {
 13            printf("Customer ID: %d", customerID);
 14            printf("\nCustomer Name: %s", name);
 15            printf("\nUnits Consumed: %d", units);
 16            chargesPerUnit = 16.2;
 17            totalAmount = chargesPerUnit * units;
 18            printf("\nTotal Amount to Pay: %.2f", totalAmount);
 19        }
 20        else if(units >= 200 && units < 300) {
 21            printf("Customer ID: %d", customerID);
 22            printf("\nCustomer Name: %s", name);
 23            printf("\nUnits Consumed: %d", units);
 24            chargesPerUnit = 20.10;
 25            totalAmount = chargesPerUnit * units;
 26            printf("\nTotal Amount to Pay: %.2f", totalAmount);
 27        }
 28        else if(units >= 300 && units < 500) {
 29            printf("Customer ID: %d", customerID);
 30            printf("\nCustomer Name: %s", name);
 31            printf("\nUnits Consumed: %d", units);
 32            chargesPerUnit = 28.10;
 33            totalAmount = chargesPerUnit * units;
 34            printf("\nTotal Amounxt to Pay: %.2f", totalAmount);
 35        }
 36        else if(units >= 500) {
 37            printf("Customer ID: %d", customerID);
 38            printf("\nCustomer Name: %s", name);
 39            printf("\nUnits Consumed: %d", units);
 40            chargesPerUnit = 35.90;
 41            totalAmount = chargesPerUnit * units;
 42            if (totalAmount > 18000) {
 43                subcharges = totalAmount * 0.15;
 44                subChargedAmount = totalAmount + subcharges;
 45                printf("\nSubcharges: %.2f", subcharges);
 46                printf("\nTotal Amount to Pay: %.2f", subChargedAmount);
 47            }
 48            else{
 49                printf("\nTotal Amount to Pay: %.2f", totalAmount);
 50            }
 51        }
 52        return 0;
 53    }
```

6

```c
C  6.c > ⊗ main()
1    #include <stdio.h>
2    int main() {
3        int n;        //positive integer
4        printf("Enter a positive number: ");
5        scanf("%d", &n);
6        if(n == 1) {
7            printf("ONE");
8        }
9        else if(n == 2) {
10           printf("TWO");    }
11       else if(n == 3) {
12           printf("THREE"); }
13       else if (n == 4) {
14           printf("FOUR");   }
15       else if(n == 5) {
16           printf("FIVE");   }
17       else if(n == 6) {
18           printf("SIX");    }
19       else if(n == 7) {
20           printf("SEVEN"); }
21       else if(n == 8) {s
22           printf("EIGHT");
23       }
24       else if(n == 9) {
25           printf("NINE");
26       }
27       else{
28           printf("Greater than NINE");
29       }
30       return 0;
31   }
```

```
OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS


D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>gcc 6.c -o 6.exe

D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>6.exe
Enter a positive number: 3
THREE
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>6.exe
Enter a positive number: 4
FOUR
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>6.exe
Enter a positive number: 10
Greater than NINE
D:\MY ASSIGNMENTS\PF-LAB-ASSIGNMENT\LAB-4>
```