Atta Lab 4

Q1)

```
1 // Online C compiler to run C program online
                                                                                                 /tmp/utaXEMioUp.o
2 #include<stdio.h>
                                                                                                 Input a number: 63
4 - int main(){
                                                                                                 Number is a multiple of 3
       int number, x;
       printf("Input a number: ");
                                                                                                 === Code Execution Successful ===
       scanf("%d", &number);
       x = number\%3;
       switch (x) {
 9 +
10
           case 0:
               printf("\nNumber is a multiple of 3");
11
               break;
12
13
           default:
               printf("\nNumber is not a multiple of 3");
14
          break;
15
16
17
       return 0;
18 }
```

```
∝° Share
                                                                                                   Output
main.c
                                                                                         Run
 1 // Online C compiler to run C program online
                                                                                                 /tmp/jk2eBlYJqN.o
                                                                                                  Enter an Operator (+,-,*,/): /
 2 #include<stdio.h>
                                                                                                  Enter Number 1: 4
 4 - int main() {
       printf("Enter an Operator (+,-,*,/): ");
 6
       char operator;
                                                                                                  Enter Number 2: 2
 7
       scanf("%c", &operator);
       printf("\nEnter Number 1: ");
                                                                                                  4.00 / 2.00 = 2.00
       float num1;
 9
10
       scanf("%f", &num1);
                                                                                                  === Code Execution Successful ===
11
       printf("\nEnter Number 2: ");
       float num2:
12
       scanf("%f", &num2);
13
14
       float result:
15 +
       switch (operator) {
           case '+':
16
17
               result = num1 + num2;
18
               printf("\n%.2f %c %.2f = %.2f", num1, operator, num2, result);
19
           break;
           case '-':
20
21
               result = num1 - num2:
22
               printf("\n%.2f %c %.2f = %.2f", num1, operator, num2, result);
23
               break;
           case '*':
24
               result = num1 * num2;
25
               printf("\n%.2f %c %.2f = %.2f", num1, operator, num2, result);
26
27
               break;
            case '/':
28
                result = num1 / num2;
29
30
               printf("\n%.2f %c %.2f = %.2f", num1, operator, num2, result);
31
               break;
32
           default:
33
               printf("\nInvalid Operator");
34
          break;
35
36
       return 0;
```

```
main.c
                                                                                         Run
                                                                                                   Output
 1 // Online C compiler to run C program online
                                                                                                 /tmp/MSsG05zW77.o
 2 #include<stdio.h>
                                                                                                 Enter a character: B
 3
 4 - int main() {
                                                                                                 The character is a CAPITAL LETTER
        char abc;
       printf("Enter a character: ");
                                                                                                 === Code Execution Successful ===
       scanf("%c", &abc);
 8
 9 +
       if (abc>=65 && abc<=90) {
           printf("\nThe character is a CAPITAL LETTER");
10
       } else if (abc>=97 && abc<=122) {</pre>
11 -
12
           printf("\nThe character is a SMALL LETTER");
13 -
       } else if (abc>=48 && abc<=57) {
           printf("\nThe character is a NUMBER");
14
15 +
       } else {
16
           printf("\nThe character is a SPECIAL CHARACTER");
17
       }
18
19
        return 0;
20 }
```

```
∝ Share
                                                                                           Run
                                                                                                      Output
main.c
 1 // Online C compiler to run C program online
                                                                                                   /tmp/w9lZytUbmU.o
 2 #include<stdio.h>
                                                                                                    Input Total Cost: 2679
 4 - int main() {
                                                                                                    10% Discount
                                                                                                    You have to pay Rs. 2411.10
 5
        printf("Input Total Cost: ");
 6
        float cost;
                                                                                                    You saved Rs. 267.90
 7
        scanf("%f", &cost);
                                                                                                    === Code Execution Successful ===
 8
 9 +
        if (cost<0) {
            printf("\nInvalid Input");
10
11 -
        } else if (cost>=0 && cost<500) {
12
            printf("\nZero Discount\nYou have to pay Rs. %.2f", cost);
13
            printf("\nYou saved Rs. 0");
14 -
        } else if (cost>=500 && cost<2000) {</pre>
15
            float final, discount = 5;
16
            final = (100-discount)*(cost)/100;
17
            printf("\n5%% Discount\nYou have to pay Rs. %.2f", final);
18
            printf("\nYou saved Rs. %.2f", cost-final);
19 -
        } else if (cost>=2000 && cost<4000) {
20
            float final, discount = 10;
            final = (100-discount)*(cost)/100;
21
22
            printf("\n10% Discount\nYou have to pay Rs. %.2f", final);
            printf("\nYou saved Rs. %.2f", cost-final);
23
24 -
        } else if (cost>=4000 && cost<6000) {
25
            float final, discount = 20:
26
            final = (100-discount)*(cost)/100;
27
            printf("\n20%% Discount\nYou have to pay Rs. %.2f", final);
28
            printf("\nYou saved Rs. %.2f", cost-final);
29 -
        } else {
30
            float final, discount = 35;
31
            final = (100-discount)*(cost)/100;
            printf("\n35%% Discount\nYou have to pay Rs. %.2f", final);
32
33
            printf("\nYou saved Rs. %.2f", cost-final);
34
35
        return 0;
36 }
```

```
[] G & Share
                                                                                     Run
                                                                                                Output
main.c
 1 // Online C compiler to run C program online
                                                                                              /tmp/51aUgABvQv.o
 2 #include<stdio.h>
                                                                                              Enter Your Name Initial: A
 3
 4 - int main() {
                                                                                              Enter your ID: 19
       printf("Enter Your Name Initial: ");
       char A;
                                                                                              Enter units used: 800
       scanf("%c", &A);
                                                                                              CustomerID: 19
 9
       printf("\nEnter your ID: ");
                                                                                              Customer Name Initial: A
10
                                                                                              Units Used: 800
       int ID;
       scanf("%d", &ID);
11
                                                                                              Charges per Unit: 35.90
12
       printf("\nEnter units used: ");
                                                                                              Amount before surchage: 28720.00
13
       int units;
                                                                                              Surcharge: 4308.00
14
       scanf("%d", &units);
                                                                                              Net Amount: 33028.00
15
       float cpu, bill = 0;
16
                                                                                              === Code Execution Successful ===
17 -
       switch (units) {
18
           case 0 ... 199:
               bill = bill + units*16.2;
19
20
               cpu = 16.2;
21
               break;
22
         case 200 ... 299:
23
            bill = bill + units*20.1;
24
            cpu = 20.1;
25
            break:
26
        case 300 ... 499:
27
            bill = bill + units*27.1;
28
               cpu = 27.1;
29
              break;
30
           default:
31
              bill = bill + units*35.9;
32
               cpu = 35.9;
33
               break;
34
35 +
       if (bill>18000) {
            float newbill = bill;
36
37
           bill = bill*1.15;
38
           float surcharge = bill - newbill;
39
           printf("\nCustomerID: %d\nCustomer Name Initial: %c\nUnits Used: %d\nCharges per
               Unit: %.2f\nAmount before surchage: %.2f\nSurcharge: %.2f\nNet Amount: %.2f\n
               ID, A, units, cpu, newbill, surcharge, bill);
40 -
       } else {
41
           printf("\nCustomerID: %d\nCustomer Name Initial: %c\nUnits Used: %d\nCharges per
               Unit: %.2f\nSurcharge=0\nNet Amount: %.2f", ID, A, units, cpu, bill);
42
       }
43
       return 0;
44 }
```

```
Run
                                                                                                 Output
main.c
 2 #include<stdio.h>
                                                                                               /tmp/hw0Y7d4jNQ.o
 3
                                                                                               Enter a positive number: 7
 4 - int main() {
       printf("Enter a positive number: ");
                                                                                                seven
       int num;
                                                                                               === Code Execution Successful ===
       scanf("%d", &num);
 8
 9 +
       if (num<=0) {
10
           printf("\nInvalid Input");
       } else {
11 +
12 -
           switch (num) {
13
               case 1:
14
                   printf("\none"); break;
15
              case 2:
16
                  printf("\ntwo"); break;
17
              case 3:
18
                   printf("\nthree"); break;
19
              case 4:
                   printf("\nfour"); break;
20
21
               case 5:
22
                   printf("\nfive"); break;
23
              case 6:
24
                   printf("\nsix"); break;
25
              case 7:
26
                   printf("\nseven"); break;
27
              case 8:
                   printf("\neight"); break;
28
29
              case 9:
30
                   printf("\nnine"); break;
               default:
31
                   printf("\ngreater than 9"); break;
32
      }
33
34
       }
35
36
       return 0;
37 }
```