

For Assignment

Question 1:-

Calculator

```
int main() {  
    int n1, n2, operation, opt;  
    do {  
        printf("Enter which erati operation: \n 1. ADD \n 2. SUBTRACT \n 3. MULTIPLY \n  
4. DIVIDE");  
        scanf("%d", &operation);  
        printf("Enter n1");  
        scanf("%d", &n1);  
        printf("Enter n2");  
        scanf("%d", &n2);  
  
        if (operation == 1) {  
            printf("Answer = %d \n", n1 + n2);  
        }  
        elseif (operation == 2) {  
            printf("Answer = %d \n", n1 - n2);  
        }  
        elseif (operation == 3) {  
            printf("Answer = %d \n", n1 * n2);  
        }  
        elseif (operation == 4) {  
            printf if (n2 == 0) {  
                printf("Division by 0 not allowed");  
            }  
            else {  
                printf("Answer = %d \n", n1 / n2);  
            }  
        }  
    } while (opt != 0);  
}
```

```
else {  
    printf("Invalid Choice\n");  
}
```

```
printf("Do you wish to continue? \n 0: Cont. \n 1: Terminate\n");  
scanf("%d", &opt);  
}  
while (opt != 1);  
}
```

Question 2:-

Student Grade Calculator

```
int main(){  
    int nSub, marks, tmarks = 0;  
    char OverallGrade;  
    printf("How many subject's marks do you want to add? ");  
    scanf("%d", &nSub);  
    if (nSub <= 0)  
    {  
        printf("Invalid Input");  
    }  
    for (int i = 0; i < nSub; i++)  
    {  
        printf("Enter Marks: ");  
        scanf("%d\n", &marks);  
        if (marks < 55)  
            printf("Fail");  
        elseif (marks >= 55 && marks < 65)  
            printf("C+");  
    }  
}
```



```
elseif (marks >= 65 && marks < 75)
    printf("B");
```

```
elseif (marks >= 75 && marks < 85)
    printf("B+");
```

```
elseif (marks >= 85 && marks < 95)
    printf("A");
```

```
elseif (marks >= 95 && marks <= 100)
    printf("A+");
```

```
else
```

```
    printf("Invalid");
```

```
totalmarks += marks
```

```
if (tmarks < (nSub * 55))
```

```
    OverallGrade = "F";
```

```
elseif (tmarks < (nSub * 65))
```

```
    OverallGrade = "C";
```

```
elseif (tmarks < (nSub * 75))
```

```
    OverallGrade = "B";
```

```
elseif (tmarks < (nSub * 85))
```

```
    OverallGrade = "B+";
```

```
elseif (tmarks < (nSub * 95))
```

```
    OverallGrade = "A";
```

```
else
```

```
    OverallGrade = "A+";
```

```
printf("%d", OverallGrade)
```

Question 3:-

Temperature Conversion tool

```
int main () {
```

```
    int choice;
```

```
    float temp, conv;
```

```
    printf ("Temperature Conversion Menu: \n 1. Celsius to Fahrenheit \n  
2. Fahrenheit to Celsius \n 3. Celsius to Kelvin \n 4. Kelvin to Celsius  
\n 5. Fahrenheit to Kelvin \n 6. Kelvin to Fahrenheit ")
```

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

```
    printf ("Enter temperature")
```

```
    scanf ("%f", &temp)
```

```
    switch (choice) {
```

```
        case 1:
```

```
            printf ("%f", (temp * 9/5) + 32);
```

```
            break;
```

```
        case 2:
```

```
            printf ("%f", (temp - 32) * 5/9);
```

```
            break;
```

```
        case 3:
```

```
            printf ("%f", temp + 273);
```

```
            break;
```

```
        case 4:
```

```
            printf ("%f", temp - 273);
```

```
            break;
```


Case 5:

```
printf("%.f", ((temp - 32) * 5/9) + 273);  
break;
```

Case 6:

```
printf("%.f", ((temp - 273) * 9/5) + 32);  
break;
```

default:

```
printf("Invalid choice");
```

Question 4:-

Restaurant Ordering System

```
int main()
```

```
{ const int P=1500, F=50, B=300, N=500, Bu=500;
```

```
int quantity, opt, stop=0, newPrice=0, count=0, totalBill=0
```

```
printf("\n The menu is: \n 1. Pizza \t 1500 \n 2. Fries \t 50 \n 3.  
Biryani \t 300 \n 4. Nihari \t 500 \n 5. Burger \t 500");
```

```
while(stop==0)
```

```
{ printf("\n Which option do you choose? ");
```

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

```
printf("How much do you want to order? ");
```

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

```
switch(opt)
```

```
{
```

case 1:

newPrice = P x quantity

printf("%d Pizza is of %d\n", quantity, newPrice);

break;

case 2:

newPrice = F x quantity;

printf("%d Fries is of %d\n", quantity, newPrice);

break;

case 3:

newPrice = B x quantity;

printf("%d Biryani is of %d\n", quantity, newPrice);

break;

case 4:

newPrice = N x quantity;

printf("%d Nihari is of %d\n", quantity, newPrice);

break;

case 5:

newPrice = Bu x quantity;

printf("%d Burger is of %d", quantity, newPrice);

break;

default:

printf("Invalid Input"); }

totalBill += newPrice

printf("\n Do you wish to order more? \n 0: Continue \n 1: No \n");

scanf("%d", &stop);

count++;

if (stop == 1)

{ printf("The bill is: \n");

printf("%d", totalBill); }