

Assignment 1

if else

1). Finding F from C (temp)

```
#include <stdio.h>
void main (){
    float celsius, fahrenheit;
    // printf("Enter fahrenheit temperature : ");
    // scanf("%f", &fahrenheit);
    // printf("\nFahrenheit temp is = %.2f",fahrenheit);

    //convert fahrenheit=10 to celsius
    fahrenheit=10;
    celsius = (fahrenheit - 32) * 5/9;
    printf("\nConverted into celsius is = %.2f",celsius);
}
```

```
1 #include <stdio.h>
2 void main (){
3     float celsius, fahrenheit;
4     // printf("Enter fahrenheit temperature : ");
5     // scanf("%f", &fahrenheit);
6     // printf("\nFahrenheit temp is = %.2f",fahrenheit);
7
8     //convert fahrenheit=10 to celsius
9     fahrenheit=10;
10    celsius = (fahrenheit - 32) * 5/9;
11    printf("\nConverted into celsius is = %.2f",celsius);
12 }
```

15 Compile Log Debug Find Results Close

- C Compiler: C:\Program Files (x86)\Dev-Cpp\MinGW64\bin\gcc.exe
- Command: gcc.exe "C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Program\1.c"

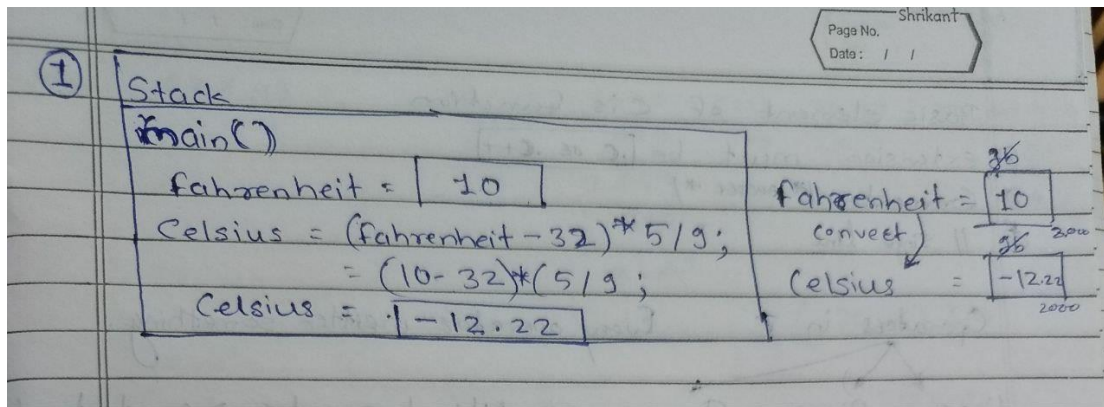
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Program\1.exe
- Output Size: 127.955078125 KiB
- Compilation Time: 0.88s

C:\JAVA FULL STACK 25-Oct-2 x + v

Converted into celsius is = -12.22

Process exited after 0.03353 seconds with return value 35
Press any key to continue . . . |



2. Finding area and perimeter of rectangle or circle.

```
#include <stdio.h>
//Finding area and perimeter of rectangle or circle
void main (){

    float area, length, width, perimeter;
    printf("Enter length = ");
    scanf("%f",&length);

    printf("\nEnter width = ");
    scanf("%f",&width);

    //calculate area
    area=length*width; //10*20
    printf("\nArea of rectangle is = %.2f",area);

    //calculate perimeter
    perimeter=2*(length+width);
    printf("\nPerimeter of rectangle is = %.2f", perimeter);
}
```

```

1 #include <stdio.h>
2 //Finding area and perimeter of rectangle or circle
3 void main (){
4
5     float area, length, width, perimeter;
6     printf("Enter length = ");
7     scanf("%f",&length);
8
9     printf("\nEnter width = ");
10    scanf("%f",&width);
11
12    //calculate area
13    area=length*width; //10*20

```

Compile Log | Debug | Find Results | Close

- C Compiler: C:\Program Files (x86)\Dev-Cpp\MinGW64\bin\gcc.exe
 - Command: gcc.exe "C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Pro

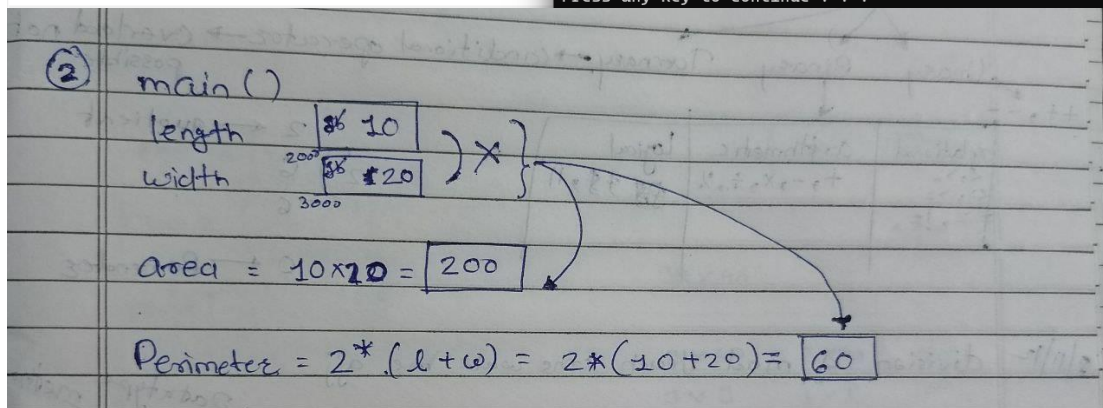
Compilation results...

 - Errors: 0
 - Warnings: 0
 - Output Filename: C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Pro
 - Output Size: 128.6337890625 KiB
 - Compilation Time: 0.20s

C:\JAVA FULL STACK 25-Oct-2 x + v

Enter length = 10
 Enter width = 20
 Area of rectangle is = 200.00
 Perimeter of rectangle is = 60.00

 Process exited after 7.155 seconds with return value 34
 Press any key to continue . . .



3. Accept a 3 digit number from user and find the sum of the digits and also reverse the number.

```

#include <stdio.h>
//Accept a 3 digit number from user and find the sum of the digits and also
//reverse the number
void main (){
    int num=543, sum, reverse;
    // printf("Enter 3 digit number = ");
    // scanf("%d", &num);

    sum = num%10;    // 3 it will print remainder
    printf("\n%d",sum);

```

```

int sum1=num/10; // 54 it will print quotient
printf("\n%d",sum1);
int sum2=sum1%10; //4
printf("\n%d",sum2);
int sum3=sum1/10; //5
printf("\n%d",sum3);

int rev1=sum*100, rev2=sum2*10, rev3=sum3;

int total_sum=sum3+sum2+sum;
//printf("total sum = %d",total_sum);

if( total_sum >=0 && total_sum <=27 && num<=999 && num>=100) {

    printf("\nSum of %d digit is = %d", num, total_sum);
    // printf("\nReverse digit is = %d%d%d",sum,sum2,sum3);
    printf("\nReverse digit is = %d",rev1+rev2+rev3);
}
else {

    printf("\nEntered Digit is NOT 3 digit number");

}

```

```

1 #include <stdio.h>
2 //Accept a 3 digit number from user and find the sum of the digits and also
3 //reverse the number
4 void main (){
5     int num=543, sum, reverse;
6     // printf("Enter 3 digit number = ");
7     // scanf("%d", &num);
8
9     sum =num%10; // 3 it will print remainder
10    printf("\n%d",sum);
11    int sum1=num/10; // 54 it will print quotient
12    printf("\n%d",sum1);
13    int sum2=sum1%10; //4

```

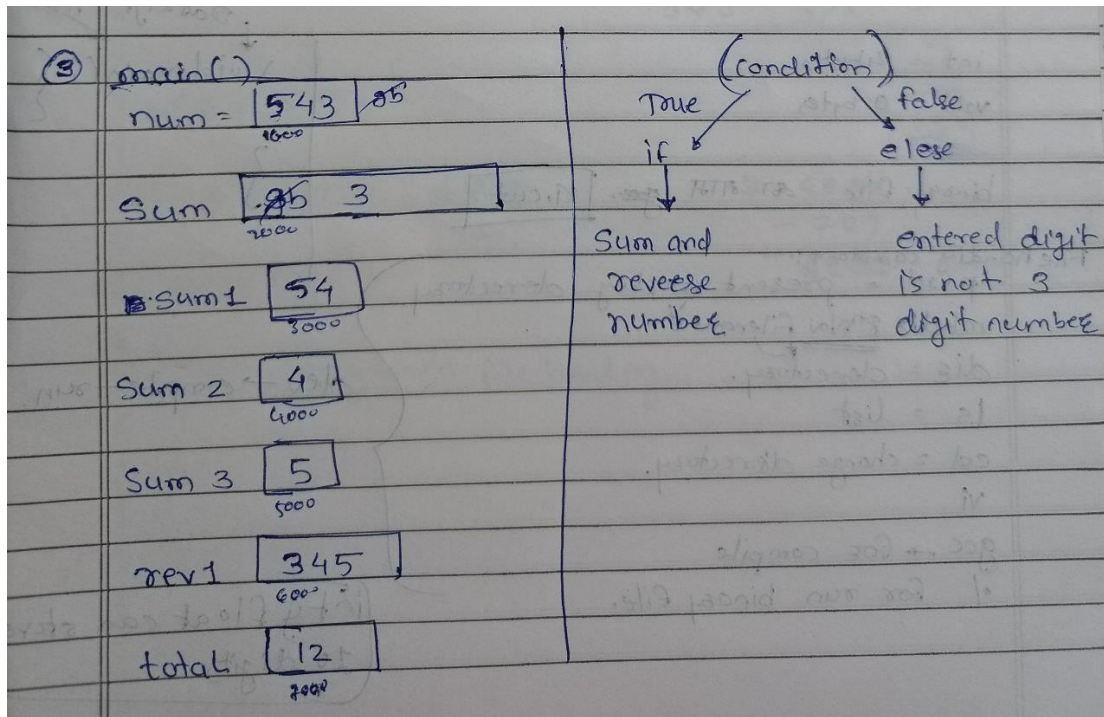
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Pro
- Output Size: 128.431640625 KiB
- Compilation Time: 0.20s

```

3
54
4
5
Sum of 543 digit is = 12
Reverse digit is = 345
-----
Process exited after 0.03509 seconds with return value 23
Press any key to continue . . .

```



4. Check if the given number is even or odd.

```
#include <stdio.h>
//Check if the given number is even or odd
void main(){
    int num;
    printf("Enter number = ");
    scanf("%d",&num); //10

    if (num/2!=0){
        printf("\n%d is ODD number",num);
    }
    else{
        printf("\n%d is EVEN number",num);
    }
}
```

```
3 void main(){
4     int num;
5     printf("Enter number = ");
6     scanf("%d",&num); //10
7
8     if (num/2!=0){
9         printf("\n%d is ODD number",num);
10    }
11    else{
12        printf("\n%d is EVEN number",num);
13    }
14 }
```

Compile Log | Debug | Find Results | Close

- C Compiler: C:\Program Files (x86)\Dev-Cpp\MinGW64\bin\gcc.exe
- Command: gcc.exe "C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Pro

Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Pro
- Output Size: 128.1015625 KiB
- Compilation Time: 0.31s

C:\JAVA FULL STACK 25-Oct-2 x + v

Enter number = 10
10 is ODD number

Process exited after 2.415 seconds with return value 17
Press any key to continue . . . |

④ main() 25
num = 10
(10/2)

Condition: (num/2 != 0)

True → If → else →

False →

=====

5. Calculating total salary based on basic. If basic <=5000 da, ta and hra will be 10%,20% and 25% respectively otherwise da, ta and hra will be 15%,25% and 30% respectively.

```
#include <stdio.h>
void main() {
    // Declare variables
    float basic, da, ta, hra, totalSalary;

    // Input basic salary
    printf("Enter basic salary: ");
    scanf("%f", &basic); //6000

    // Check the condition and calculate allowances accordingly
```

```

if (basic <= 5000) {
    da = basic*10/100;
    ta = basic*20/100;
    hra =basic*25/100;
}

    else {
        da = basic*15/100;
        ta = basic*25/100;
        hra =basic*30/100;
    }

// Calculate total salary
totalSalary = basic + da + ta + hra;

// Display the result
printf("\nBasic Salary: %.2f\n", basic);
printf("DA: %.2f\n", da);
printf("TA: %.2f\n", ta);
printf("HRA: %.2f\n", hra);
printf("Total Salary: %.2f\n", totalSalary);
}

```

The screenshot displays a C program in a code editor and its execution output in a terminal window. The code calculates allowances (DA, TA, HRA) based on a basic salary. If the basic salary is less than or equal to 5000, DA is 10%, TA is 20%, and HRA is 25%. Otherwise, DA is 15%, TA is 25%, and HRA is 30%. The total salary is the sum of basic salary and allowances.

```

1  #include <stdio.h>
2  void main() {
3      // Declare variables
4      float basic, da, ta, hra, totalSalary;
5
6      // Input basic salary
7      printf("Enter basic salary: ");
8      scanf("%f", &basic);          //6000
9
10     // Check the condition and calculate allowances accordingly
11     if (basic <= 5000) {
12         da = basic*10/100;
13         ta = basic*20/100;

```

Compilation results...

```

- Errors: 0
- Warnings: 0
- Output Filename: C:\JAVA FULL STACK 25-Oct-2023\First_Bit\C Pro
- Output Size: 129.1015625 KiB
- Compilation Time: 0.20s

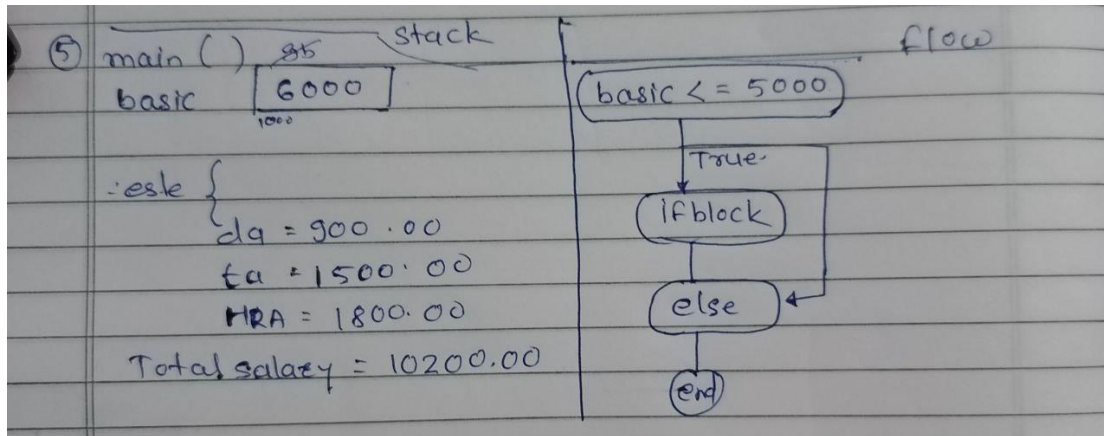
```

Output window (C:\JAVA FULL STACK 25-Oct-2):

```

Enter basic salary: 6000
Basic Salary: 6000.00
DA: 900.00
TA: 1500.00
HRA: 1800.00
Total Salary: 10200.00
-----
Process exited after 3.305 seconds with return value 23
Press any key to continue . . .

```

6. Write a program to check if person is eligible to marry or not (male age ≥ 21 and female age ≥ 18).

```
#include <stdio.h>
//Write a program to check if person is eligible to marry or not
//(male age  $\geq 21$  and female age  $\geq 18$ ).
void main (){
    int male_age, female_age;

    printf("Enter MALE age = ");
    scanf("%d", &male_age);

    printf("\nEnter FEMALE age = ");
    scanf("%d", &female_age);

    if (male_age  $\geq 21$  && female_age  $\geq 18$  ){
        printf("\nMale and Female both can marry");
    }
    else {
        printf("\nUfff.. Male and Female can NOT marry");
    }
}
```



```

1 #include <stdio.h>
2 //Write a program to check if person is eligible to marry or not
3 //(male age >=21 and female age>=18).
4 void main (){
5     int male_age, female_age;
6
7     printf("Enter MALE age = ");
8     scanf("%d", &male_age);
9
10    printf("\nEnter FEMALE age = ");
11    scanf("%d", &female_age);
12
13    if (male_age>=21 && female_age>=18 ){

```

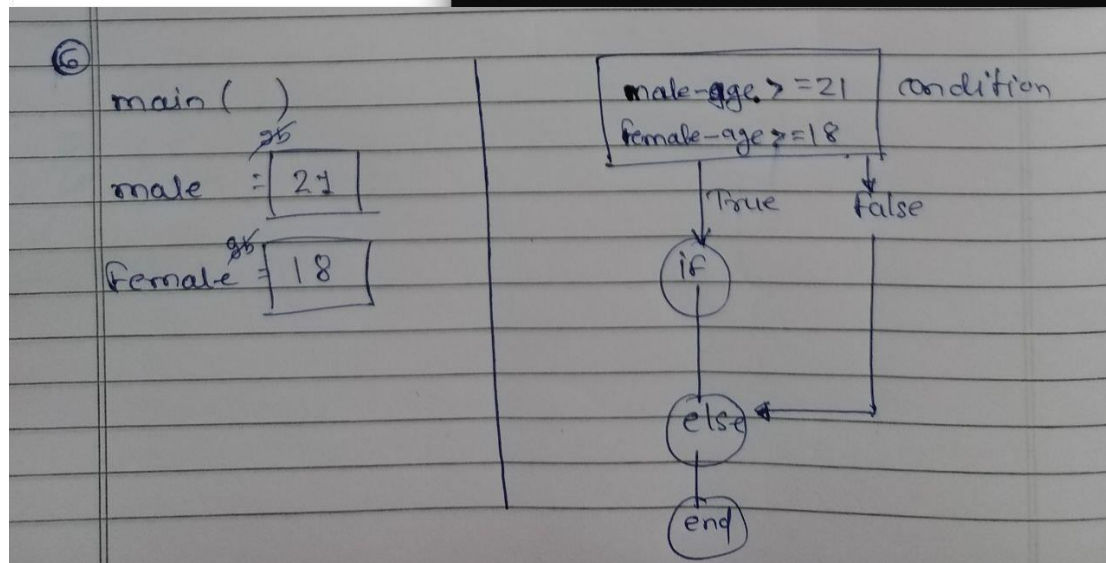
Compile Log
Debug
Find Results
Close

C Compiler: C:\Program Files (x86)\Dev-Cpp\MinGW64
Command: gcc.exe "C:\JAVA FULL STACK 25-Oct-2023\B

C:\JAVA FULL STACK 25-Oct-2
+
v

Enter MALE age = 21
Enter FEMALE age = 18
Male and Female both can marry

Process exited after 2.955 seconds with return value 31
Press any key to continue . . .



END