

TUTORIALS – 5

(MODULE – 2)

1. Write a C program to read the age of a candidate and determine whether he/she is eligible to cast his/her vote. (Use if-else)
 - a. Test Data: 21
 - b. Expected Output: Congratulations! You are eligible to cast your vote

main.c	Output
<pre>1- /*MODULE 2, TUTORIALS - 5 2 1. Write a C program to read the age of a candidate and determine whether he/she is eligible to cast his/her vote. (Use if-else) 3 a. Test Data: 21 4 b. Expected Output: Congratulations! You are eligible to cast your vote*/ 5 #include <stdio.h> 6 int main() 7 { 8 int age; 9 printf("Enter Your Age:"); 10 scanf("%d", &age); 11 12 if (age>=18) 13 { 14 printf("Congratulations! You are eligible to cast your vote"); 15 } 16 else 17 { 18 printf("Sorry! You are not eligible to cast your Vote"); 19 } 20 } 21 22 return 0; 23 }</pre>	<pre>/tmp/tAKLjczXC.s.o Enter Your Age:19 Congratulations! You are eligible to cast your vote</pre>

2. If the ages of Ram, Shyam, and Ajay are input through the keyboard, write a program to determine the youngest of the three. (Use if-else if...else)

main.c	Output
<pre>1- /*MODULE 2, TUTORIALS 5 2- 2. If the ages of Ram, Shyam, and Ajay are input through the keyboard, write a 3- program to determine the youngest of the three. (Use if-else if...else)*/ 4- 5- #include <stdio.h> 6- int main() 7- { 8- int Ram_Age, Shyam_Age, Ajay_Age; 9- printf("Enter Ages of Ram, Shyam, and Ajay:\n"); 10- scanf("%d %d %d", &Ram_Age, &Shyam_Age, &Ajay_Age); 11- 12- if (Ram_Age <= Shyam_Age && Ram_Age <= Ajay_Age) 13- { 14- printf("Ram is the youngest\n"); 15- } 16- else if (Shyam_Age <= Ram_Age && Shyam_Age <= Ajay_Age) 17- { 18- printf("Shyam is the youngest\n"); 19- } 20- else 21- { 22- printf("Ajay is the youngest\n"); 23- } 24- 25- return 0; 26- } 27-</pre>	<pre>/tmp/pm50gJtphe.o Enter Ages of Ram, Shyam, and Ajay: 12 07 35 Shyam is the youngest </pre>

3. Program checks whether a number given by the user is zero, positive, or negative

```
main.c  [Icons] [Save] [Run] Output
1- /*MODULE 2, TUTORIALS 5
2 3. Program checks whether a number given by the user is zero, positive, or negative*/
3 #include <stdio.h>
4 int main()
5 {
6     int num;
7     printf("Enter a number:\n");
8     scanf("%d", &num);
9
10    if (num>0)
11    {
12        printf("The Number is Positive\n");
13    }
14    else if (num<0)
15    {
16        printf("The Number is Negative\n");
17    }
18    else
19    {
20        printf("The Number is Zero\n");
21    }
22
23    return 0;
24 }
25
26
```

```
/tmp/pm50gJtphe.o
Enter a number:
0
The Number is Zero
```

```
/tmp/pm50gJtphe.o
Enter a number:
45
The Number is Positive
```

```
/tmp/pm50gJtphe.o
Enter a number:
-45
The Number is Negative
```

4. Write a C program to read roll no, name, and marks of three subjects and calculate the total, percentage.

- a. If the percentage of the marks ≥ 75 then print First Class with Distinction
- b. If the percentage of the marks ≥ 60 and < 75 print First Class
- c. If the percentage of the marks < 60 print Second Class

main.c



Save

Run

```
1  #include <stdio.h>
2  int main() {
3      int Roll_Num;
4      char Name[50];
5      float Marks1, Marks2, Marks3, Total_Marks, Percentage;
6
7      printf("Enter Roll Num, Name, Marks of Three Subjects:\n");
8      scanf("%d %s %f %f %f", &Roll_Num, &Name, &Marks1, &Marks2, &Marks3);
9
10     Total_Marks = Marks1 + Marks2 + Marks3;
11     Percentage = (Total_Marks / 300) * 100;
12
13     printf("Total Marks: %f\n", Total_Marks);
14     printf("Percentage: %f\n", Percentage);
15
16     if (Percentage >= 75)
17     {
18         printf("First Class with Distinction\n");
19     }
20     else if (Percentage >= 60 && Percentage < 75)
21     {
22         printf("First Class\n");
23     }
24     else
25     {
26         printf("Second Class\n");
27     }
28
29     return 0;
30 }
```

Output

/tmp/E034NBwRDz.o

Enter Roll Num, Name, Marks of Three Subjects:

45

Karthik-Krishnan

95

89

92

Total Marks: 276.000000

Percentage: 92.000000

First Class with Distinction

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5. Write a C Program to check whether a given number is less than 100. if so check whether it is odd or even. Otherwise display the result as “it is a positive number greater than 100”. (Use Nested if)

main.c	Output
<pre>1 //MODULE 2, TUTORIALS 5 2 //5. Write a C Program to check whether a given number is less than 100. if so check whether it is odd or even. Otherwise display the result as "it is a positive number greater than 100". (Use Nested if) 3 4 #include <stdio.h> 5 int main () 6 { 7 int number; 8 printf("Enter a number"); 9 scanf("%d", &number); 10 11 if (number<100) 12 if (number % 2 == 0) 13 { 14 printf("The number %d is less than 100 and even", number); 15 } 16 else 17 { 18 printf("The number %d is less than 100 and odd", number); 19 } 20 else 21 { 22 printf("The number %d is positive and greater than or equal to 100", number); 23 } 24 25 return 0;</pre>	<pre>/tmp/E034NBwRDz.o Enter a number142 The number 142 is positive and greater than or equal to 100</pre>