








## Week 5





Q1)

main.c	   Share		Output
<pre>1 // Online C compiler to run C program online 2 #include&lt;stdio.h&gt; 3 4 int main() { 5     printf("Enter your Age: "); 6     int age; 7     scanf("%d", &amp;age); 8     if (age&lt;0) 9         printf("Invalid Input"); 10    else if (age&gt;0 &amp;&amp; age&lt;=12) 11        printf("You are a Child"); 12    else if (age&gt;12 &amp;&amp; age&lt;=18) 13        printf("You are a Teenager"); 14    else if (age&gt;18 &amp;&amp; age&lt;=49) 15        printf("You are an Adult"); 16    else if (age&gt;50) 17        printf ("You are a Senior"); 18 19    return 0; 20 }</pre>			<pre>/tmp/NnAl0Ig10j.o Enter your Age: 13 You are a Teenager  === Code Execution Successful ===</pre>




## Q2)

main.c	<div><div></div><div></div><div> Share</div><div><b>Run</b></div></div>	Output
	<pre>4 ▾ int main() { 5     printf("Enter a Number: "); 6     int num; 7     scanf("%d", &amp;num); 8 ▾     if (num&lt;0) { 9         printf("%d is Negative", num); 10    } 11 ▾    else if (num==0) { 12        printf("Number is Zero"); 13    } 14 ▾    else if (num&gt;0) { 15        int num2 = num%2; 16 ▾        if (num2==0) { 17            printf("%d is Positive and Even", num); 18 ▾        } else { 19            printf("%d is Positive and Odd", num); 20        } 21    } 22    return 0; 23 }</pre>	<pre>/tmp/0EAmbcoo6f.o Enter a Number: 7 7 is Positive and Odd  === Code Execution Successful ===</pre>

### Q3)

<div>main.c</div> <div> Share</div> <div></div>	Output
<pre>3 4  #include&lt;stdio.h&gt; 5 6  int main() { 7      printf("Enter a Number: "); 8      int num; 9      scanf("%d", &amp;num); 10     if (num%3==0 &amp;&amp; num%5==0) { 11         printf("%d is divisible by 3 and 5", num); 12     } else if (num%3==0 &amp;&amp; num%5!=0 ){ 13         printf("%d is divisible by 3 but not divisible by 5", 14             num); 15     } else if (num%5==0 &amp;&amp; num%3!=0) { 16         printf("%d is divisible by 5 but not divisible by 3", 17             num); 18     } else { 19         printf("%d is neither divisible by 3 or 5", num); 20     }</pre>	<pre>/tmp/Ioy230LEMJ.o Enter a Number: 63 63 is divisible by 3 but not divisible by 5  === Code Execution Successful ===</pre> <div>Activat Go to Se</div>





## Q4)

<div>main.c</div> <div> Share</div> <div>Run</div>	Output
<pre>1 // Online C compiler to run C program online 2 #include &lt;stdio.h&gt; 3 4 int main() { 5     int age; 6     printf("Enter your Age: "); 7     scanf("%d", &amp;age); 8 9     char verify; 10    printf("Do you have a Pakistani Citizenship (Y/N): "); 11    scanf(" %c", &amp;verify); 12 13    if (age&gt;=18 &amp;&amp; verify=='Y') 14        printf("You are eligible to Vote"); 15    else 16        printf("Your are ineligible to Vote"); 17 18    return 0; 19 }</pre>	<pre>/tmp/hjrDYyYHPT.o Enter your Age: 23 Do you have a Pakistani Citizenship (Y/N): N Your are ineligible to Vote  === Code Execution Successful ===</pre> <div>Activate V Go to Setting</div>




Q5)

<div>main.c</div> <div> Share</div> <div>Run</div>	Output
<pre>1 // Online C compiler to run C program online 2 #include&lt;stdio.h&gt; 3 4 int main() { 5     printf("Enter 1st number: "); 6     int num1; 7     scanf("%d", &amp;num1); 8     printf("Enter 2nd number: "); 9     int num2; 10    scanf("%d", &amp;num2); 11 12    (num1&gt;num2)?printf("%d is greater than %d", num1, num2 13                  ):printf("%d is greater than %d", num2, num1); 14 15    return 0; 16 }</pre>	<pre>/tmp/dEG3djej7H.o Enter 1st number: -7 Enter 2nd number: -43 -7 is greater than -43  === Code Execution Successful ===</pre>


Q6)

main.c	   Share 	Output
<pre>1 // Online C compiler to run C program online 2 #include &lt;stdio.h&gt; 3 4 int main() { 5     int Num; 6     printf("Enter a Number: "); 7     scanf("%d", &amp;Num); 8 9     (Num!=0)?(Num&gt;0)?printf("positive Number"):printf("negative         Number"):printf("number is zero"); 10    return 0; 11 }</pre>	<pre>/tmp/8AGpzxhijb.o Enter a Number: 8 positive Number  === Code Execution Successful ===</pre>	

Q7)

<div>main.c</div> <div> Share</div> <div>Run</div>	Output
<pre>1 // Online C compiler to run C program online 2 #include&lt;stdio.h&gt; 3 4 int main() { 5     int num1, num2; 6     printf("Enter number 1: "); 7     scanf("%d", &amp;num1); 8     printf("Enter number 2: "); 9     scanf("%d", &amp;num2); 10 11     num1 = num1 ^ num2; 12     num2 = num1 ^ num2; 13     num1 = num1 ^ num2; 14 15     printf("\nAfter swapping: 1st Number = %d, 2nd Number = %d", 16           num1, num2); 17 18     return 0; 19 }</pre>	<pre>/tmp/HKB7NCP1Yk.o Enter number 1: 4 Enter number 2: 13  After swapping: 1st Number = 13, 2nd Number = 4  === Code Execution Successful ===</pre> <div>Activate W Go to Settings</div>

Q9)





main.c	<div><div></div><div></div><div> Share</div><div>Run</div></div>	Output
	<pre>1 // Online C compiler to run C program online 2 #include&lt;stdio.h&gt; 3 4 int main() { 5     printf("Enter the year: "); 6     int year; 7     scanf("%d", &amp;year); 8     if ((year % 4 == 0 &amp;&amp; year % 100 != 0)    (year % 400 == 0)) { 9         printf("%d is a leap year", year); 10    } else { 11        printf("%d is not a leap year", year); 12    } 13    return 0; 14 }</pre>	<pre>/tmp/u6oLEQfoY0.o Enter the year: 2028 2028 is a leap year  === Code Execution Successful ===</pre>






## Q11)

<div><div>main.c</div><div><div><div></div><div></div><div></div></div><div>Share</div><div>Run</div></div></div> <pre>3 int main() { 4     int num1, num2, num3; 5     printf("Enter first number: "); 6     scanf("%d", &amp;num1); 7     printf("Enter second number: "); 8     scanf("%d", &amp;num2); 9     printf("Enter third number: "); 10    scanf("%d", &amp;num3); 11    if (num1 &gt;= num2) { 12        if (num1 &gt;= num3) { 13            printf("\n%d is the greatest number", num1); 14        } else { 15            printf("\n%d is the greatest number", num3); 16        } 17    } else { 18        if (num2 &gt;= num3) { 19            printf("\n%d is the greatest number", num2); 20        } else { 21            printf("\n%d is the greatest number", num3); 22        } 23    } }</pre>	<div>Output</div> <div><div>/tmp/p0kd1ldKh9.o</div><div>Enter first number: -60</div><div>Enter second number: -4</div><div>Enter third number: 23</div><div>23 is the greatest number</div><div>=== Code Execution Successful ===</div></div>
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## Q12)

main.c	   Share 	Output
<pre>4 float attendance, assignment, exam, grade; 5 printf("Enter attendance percentage (0-100): "); 6 scanf("%f", &amp;attendance); 7 printf("Enter assignment score (0-100): "); 8 scanf("%f", &amp;assignment); 9 printf("Enter exam score (0-100): "); 10 scanf("%f", &amp;exam); 11 if (attendance &gt;= 75) { 12     if (assignment &gt;= 50) { 13         if (exam &gt;= 40) { 14             grade = (attendance * 0.2) + (assignment * 0.3) 15                 + (exam * 0.5); 16             printf("Final Grade: %.2f\n", grade); 17         } else { 18             printf("Failed due to exam score.\n"); 19         } 20     } else { 21         printf("Failed due to assignment score.\n"); 22     } 23 }</pre>		<pre>/tmp/gaoq27In0G.o Enter attendance percentage (0-100): 79 Enter assignment score (0-100): 85 Enter exam score (0-100): 90 Final Grade: 86.30  === Code Execution Successful ===</pre> <div data-bbox="2700 1596 2887 1711">Activat Go to Se</div>

## Q13)

main.c	   Share 	Output
<pre>1 // Online C compiler to run C program online 2 #include &lt;stdio.h&gt; 3 4 int main() { 5     char input, encryption, decryption; 6 7     printf("Input a Character: "); 8     scanf("%c", &amp;input); 9 10    encryption = ~input; 11    decryption = ~encryption; 12 13    printf("Result after Encryption is %x", encryption); 14    printf("\nResult after Decryption is %c", decryption); 15 16    return 0; 17 }</pre>	<pre>/tmp/od0v2TvPpH.o Input a Character: M Result after Encryption is fffffffb2 Result after Decryption is M  === Code Execution Successful ===</pre>	

## Q14)

main.c	   Share 	Output
<pre>1 // Online C compiler to run C program online 2 #include&lt;stdio.h&gt; 3 4 int main() { 5     int age; 6     float income, CS; //CS = creditscore 7 8     printf("Enter age: "); 9     scanf("%d", &amp;age); 10    printf("Enter monthly income: "); 11    scanf("%f", &amp;income); 12    printf("Enter credit score: "); 13    scanf("%f", &amp;CS); 14 15    (age&gt;=18 &amp;&amp; income&gt;=50000 &amp;&amp; CS&gt;=400)? printf("Eligible for         loan"): printf("Not eligible for loan"); 16 17    return 0; 18 }</pre>	<pre>/tmp/CYvbU9GM7Z.o Enter age: 22 Enter monthly income: 63000 Enter credit score: 550 Eligible for loan  === Code Execution Successful ===</pre>	