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| **Ex.No.3** | **USAGE OF CONDITIONAL STATEMENTS** | Reg.No: URK22CS1200 |
| **9/10/22** |
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| a. Write a program to check whether the candidate’s age is greater than 18 or not. If yes, display the message ‘Eligible for voting’.  **Aim:**  To find out if the person is eligible for voting or not.  **Algorithm:**  Step 1: Start the program.  Step 2: Declare the required variables age.  Step 3: use if else to check if the age is above 18 or not  Step 4: Print them using suitable print statements  Step 5: Stop the program.  **Program:**  #include <stdio.h>  void main()  {  int age;  printf("Enter the age of the candidate : ");  scanf("%d",&age);  if(age<18)  {  printf("You are not eligible for voting !\n");  }  else  {  printf("You are eligible for voting !\n");  }  }  **Output:**    **Result:**  This program is executed successfully and checks whether the person is eligible to vote or not. |

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| b. Write a program to check whether the given number is odd or even using an if else statement.  **Aim:**  To find if the input number is even or odd  **Algorithm:**  Step 1: Start the program.  Step 2: Declare the required variable n  Step 3: Read the Input values n  Step 4: Use if else to find if the number is even or odd  Step 5: Print the result using suitable print statements  Step 6: Stop the Program.  **Program:**  #include <stdio.h>  void main()  {  int n;  printf("Enter a number of your choice : ");  scanf("%d",&n);  if(n%2==0)  {  printf("The number %d is an even number\n",n);  }  else  {  printf("The number %d is an odd number\n",n);  }  }  **Output:**    **Result:**  This program is executed successfully and we have checked whether he number is even or odd |

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| c. Write a program to print a person is Boy/Man/Girl/Women by checking their gender and age using nested if.    **Aim:**  To print the output by examining the age and gender of a person.  **Algorithm:**  Step 1: Start the program.  Step 2: Declare the required variables age and c  Step 3: Read the input values age and c  Step 4: Use nested if to find man/boy,woman/girl  Step 5: Display the result using a print statement  Step 6: Stop the Program.  **Program:**  #include <stdio.h>  void main()  {  int age;  char c;  printf("Enter 'M' for male and 'F' for female ");  scanf("%c",&c);  printf("Enter your age ");  scanf("%d",&age);  if(c=='M')  {  if(age<18)  {  printf("Hello boy\n");  }  else  {  printf("Hello there gentleman\n");  }  }  else if(c=='F')  {  if(age<18)  {  printf("You are a girl \n");  }  else  {  printf("You are a woman \n");  }  }  else  {  printf("Wrong input \n");  }  }  **Output:**    **Result:**  This program is executed successfully and we have obtained the required output. |

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| d. Write a program to calculate the gross salary for the conditions given below:  Basic salary (Rs.) DA (Rs.) HRA (Rs.) Conveyance (Rs.)  bs>=5000 110% of basic 20% of basic 500  bs>=3000 && 100% of basic 15% of basic 400  bs<5000  bs<3000 90% of basic 10% of basic 300  **Aim:**  To find the gross salary of a person after adding DA and HRA and conveyance fee..  **Algorithm:**  Step 1: Start the program.  Step 2: Declare the required variables bs,HRA,DA,gross  Step 3: Read the Input value bs  Step 4: Check the range of bs from the table given about using if else if .  Step 5: Print the required output  Step 6: End the program  **Program:**  #include <stdio.h>  void main()  {  int bs;  double HRA,DA,gross;  printf("Enter the salary earned by the person ");  scanf("%d",&bs);  if(bs>=5000)  {  DA=bs\*1.1;  HRA=bs\*0.2;  gross=DA+HRA+500;  printf("The salary inclusive of DA and HRA plus the conveyance fee is %2f\n",gross);  }  else if(bs>=3000 && bs<5000)  {  DA=bs\*1;  HRA=bs\*0.15;  gross=DA+HRA+400;  printf("The salary inclusive of DA and HRA plus the conveyance fee is %2f\n",gross);  }  else  {  DA=bs\*0.9;  HRA=bs\*0.1;  gross=DA+HRA+300;  printf("The salary inclusive of DA and HRA plus the conveyance fee is %2f\n",gross);  }  }  **Output:**    **Result:**  This program is executed successfully and the gross salary is printed successfully |

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| e. Write a program to enter a character and then determine whether it is vowel or consonant using switch case.  **Aim:**  To check whether the input letter is a vowel or a consonant  **Algorithm:**  Step 1: Start the program.  Step 2: Declare the required variable c.  Step 3: Read the Input value for c  Step 4: Check whether the input letter is a vowel or now using switch case  Step 5: Print the required output  Step 6: Stop the Program.  **Program:**  #include <stdio.h>  void main()  {  char c;  printf("Enter a character : ");  scanf("%c",&c);  switch(c)  {  case 'A':  case 'E':  case 'I':  case 'O':  case 'U':  case 'a':  case 'e':  case 'i':  case 'o':  case 'u':  printf("The letter %c is a vowel\n ",c);  break;  default:  printf("The letter %c is a consonant\n",c);  break;  }  }  **Output:**    **Result:**  This program is executed successfully and checks whether the letter is a vowel or a consonant |