**10th Class Ch#2**

**All Programming Exercise Solved Question**

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| **Q1:**  #include <stdio.h>  void main() {  float payRatePerHour, overtimePayRate;  float workingHours, overtimeHours;  float basicSalary, overtimeSalary, totalSalary;  printf("Enter Pay Rate per Hour: ");  scanf("%f", &payRatePerHour);  printf("Enter Overtime Pay Rate: ");  scanf("%f", &overtimePayRate);  printf("Enter Working Hours of Employee: ");  scanf("%f", &workingHours);  printf("Enter Overtime Hours of Employee: ");  scanf("%f", &overtimeHours);  basicSalary = payRatePerHour \* workingHours;  overtimeSalary = overtimePayRate \* overtimeHours;  totalSalary = basicSalary + overtimeSalary;  printf("\nBasic Salary = %.2f", basicSalary);  printf("\nOvertime Salary = %.2f", overtimeSalary);  printf("\nTotal Salary = %.2f\n", totalSalary);  }  **Output:**  Enter Pay Rate per Hour: 200  Enter Overtime Pay Rate: 300  Enter Working Hours of Employee: 8  Enter Overtime Hours of Employee: 2  Basic Salary = 1600.00  Overtime Salary = 600.00  Total Salary = 2200.00 | **Q2:**  #include <stdio.h>  void main() {  float tempInCelsius = 0;  printf("Enter Temperature in Celsius ... ");  scanf("%f", &tempInCelsius);  float tempInFahrenheit = (9.0/5) \* tempInCelsius + 32;  printf("\nTemperature in Fahrenheit is ... %f\n", tempInFahrenheit);  }  **Output:**  Enter Temperature in Celsius ... 25  Temperature in Fahrenheit is ... 77.00 |
| **Q3:**  #include <stdio.h>  void main() {  printf("\*\t\*\t\*\t\*\n1\t2\t3\t4");  }  **Output:**  \* \* \* \*  1 2 3 4 |
| **Q4:**  #include <stdio.h>  void main() {  printf("I am a boy\n I Live in Pakistan\n I am a proud Pakistani");  }  **Output:**  I am a boy  I Live in Pakistan  I am a proud Pakistani |
| **Q5:**  #include <stdio.h>  void main() {  float shirt1 = 423, shirt2 = 320, shirt3 = 270, shirt4 = 680, shirt5 = 520;  float totalOriginalPrice = shirt1 + shirt2 + shirt3 + shirt4 + shirt5;  float discountRate = 15.0;  float discountAmount = (discountRate / 100) \* totalOriginalPrice;  float finalPrice = totalOriginalPrice - discountAmount;  printf("Total Original Price ... %.2f\n", totalOriginalPrice);  printf("Discount Amount (15%%) ... %.2f\n", discountAmount);  printf("Final Price After Discount ... %.2f\n", finalPrice);  }  **Output:**  Total Original Price ... 2213.00  Discount Amount (15%) ... 331.95  Final Price After Discount ... 1881.05 | **Q7:**  #include <stdio.h>  void main() {  int number, firstDigit, lastDigit, sum;  printf("Enter a 5-digit number: ");  scanf("%d", &number);  firstDigit = number / 10000;  lastDigit = number % 10;  sum = firstDigit + lastDigit;  printf("First Digit = %d\n", firstDigit);  printf("Last Digit = %d\n", lastDigit);  printf("Sum of First and Last Digit = %d\n", sum);  }  **Output:**  Enter a 5-digit number: 54321  First Digit = 5  Last Digit = 1  Sum of First and Last Digit = 6 |
| **Q6:**  #include <stdio.h>  void main() {  int a, b;  printf("Enter value of a: ");  scanf("%d", &a);  printf("Enter value of b: ");  scanf("%d", &b);  printf("\nBefore Swapping: a = %d, b = %d\n", a, b);  a = a + b;  b = a - b;  a = a - b;  printf("After Swapping: a = %d, b = %d\n", a, b);  }  **Output:**  Enter value of a: 5  Enter value of b: 10  Before Swapping: a = 5, b = 10  After Swapping: a = 10, b = 5 | **Q8:**  #include <stdio.h>  void main() {  float monthlyIncome, totalYearlyIncome;  float monthlyExpense, totalYearlyExpenses;  float monthlySavings, totalYearlySaving;  float averageSavingPerMonth, averageExpensePerMonth;  printf("Enter your monthly income: ");  scanf("%f", &monthlyIncome);  printf("Enter your total monthly expenses (e.g., electricity + gas + food): ");  scanf("%f", &monthlyExpense);  totalYearlyExpenses = monthlyExpense \* 12;  totalYearlyIncome = monthlyIncome \* 12;  monthlySavings = monthlyIncome - monthlyExpense;  totalYearlySaving = monthlySavings \* 12;  averageSavingPerMonth = totalYearlySaving / 12;  averageExpensePerMonth = totalYearlyExpenses / 12;  printf("\nTotal Monthly Income : %.2f\n", monthlyIncome);  printf("Total Yearly Income : %.2f\n", totalYearlyIncome);  printf("\nTotal Monthly Expenses : %.2f\n", monthlyExpense);  printf("Total Yearly Expenses : %.2f\n", totalYearlyExpenses);  printf("\nMonthly Savings : %.2f\n", monthlySavings);  printf("Yearly Saving : %.2f\n", totalYearlySaving);  printf("\nAverage Saving per Month : %.2f\n", averageSavingPerMonth);  printf("Average Expense per Month : %.2f\n", averageExpensePerMonth);  }  **Output:**  Enter your monthly income: 50000  Enter your total monthly expenses (e.g., electricity + gas + food): 30000  Total Monthly Income : 50000.00  Total Yearly Income : 600000.00  Total Monthly Expenses : 30000.00  Total Yearly Expenses : 360000.00  Monthly Savings : 20000.00  Yearly Saving : 240000.00  Average Saving per Month : 20000.00  Average Expense per Month : 30000.00 |
| **Q9:**  #include <stdio.h>  void main() {  char Character;  int Steps;  printf("Enter character: ");  scanf(" %c", &Character);  printf("Enter steps: ");  scanf("%d", &Steps);  char NewCharacter = Character + Steps;  printf("New character : %c\n", NewCharacter);  }  **Output:**  Enter character: A  Enter steps: 3  New character : D |
| **Q10:**  #include <stdio.h>  void main() {  float radiusOfCircle;  printf("Enter Radius of Circle: ");  scanf("%f", &radiusOfCircle);  float areaOfCircle = 3.14 \* radiusOfCircle \* radiusOfCircle;  printf("Radius of Circle is %.2f\n", radiusOfCircle);  printf("Area of Circle is %.2f\n", areaOfCircle);  }  **Output:**  Enter Radius of Circle: 7  Radius of Circle is 7.00  Area of Circle is 153.86 |