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|  | **Practicals** |
| **Program: 1.1** | Write a C program that will output this passage by Michael Singer. Make sure your output looks exactly as shown here (including spacing, line breaks, punctuation, and the title and author). Use Required **Escape Sequence** and **ASCII Value.**    There are three shapes in the output: Smiling Face, Diamond & Heart.  The ASCII Value for Smiling face is 1.  The ASCII Value for Diamond is 4.  The ASCII Value for Heart is 3. |
| **Flowchart** | Print ASCII values of smile face, diamond, heart 37 times.  Print ASCII values, text, ASCII values 4 times.  Print ASCII values of smile face, diamond and heart 37 times. |
| **Algorithm** | * Step 1: Start. * Step 2: Print ASCII values of smile face, diamond, and heart 37 times. * Step 3: Print ASCII values, Text, ASCII values 4 times. * Step 4: Print ASCII values of smile face, diamond, and heart 37 times. * Step 5: Stop. |
| **Code** | #include<stdio.h>  #include<conio.h>  void main()  {  char SmileFace=1,Diamond=4,Heart=3;  clrscr();  printf(“%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c\n”,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFce,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace);  printf(“%c\If you are resisting something, you are feeding it. \t\t\t%c\n”,Diamond,Diamond);  printf(“%c\t Any energy you fight, you are feeding it. \t\t\t%c\n”,Heart,Heart);  printf(“%c\t\t If you are pushing something away, \t\t\t%c\n”,SmileFace,SmileFace);  printf(“%c\t\t\t You are inviting it to stay.\ by Michael Singer.\t%c\n”,Diamond,Diamond);  printf(“%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c%c\n”,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace,Diamond,Heart,SmileFace);  getch();  } |
| **Output** |  |
| **Program: 1.2** | In a town, the percentage of men is 52. The percentage of total literacy is 48. If total percentage of literate men is 35% of the total population, write a program to find the total number of illiterate men and women if the population of the town is 80,000. Write Algorithms and Flowchart of this program |
| **Algorithm** | * Step 1: Start * Step 2: Total Population 🡨 80,000 * Step 3: Total Men 🡨 Total Population \* (0.52) * Step 4: Literate Men 🡨 Total Population \* (0.35) * Step 5: Total Literacy 🡨 Total Population \* (0.48) * Step 6: Illiterate Men = Total Men – Literate Men * Step 7: Total Women 🡨 Total Population – Total Women * Step 8: Literate Women 🡨 Total Literacy – Literate Men * Step 9: Illiterate Women 🡨 Total Women – Literate Women * Step 10: Print Total Population , Total Men , Literate Men , Total Literacy , Illiterate Men , Total Women , Literate Women , Illiterate Women. * Step 11: STOP |
| **Flowchart** | Total Men <- Total Population\*(0.52)  Literate Men <- Total Population\*(0.35)  Total Literacy <- Total Population\*(0.48)  Illiterate Men <- Total Men – Literate Men  Total Women <- Total Population – Total Men  Literate Women <- Total Literacy – Literate Men  Literate Women <- Total Women – Literate Women  Print Total Population, Total Men, Total Literacy, Total Literate Men, Total Women, Literate Women, Illiterate Women. |
| **Code** | #include<stdio.h>  #include<conio.h>  void main()  {    long int TotalPerson,TotalLitePerson,TotalMen,TotalWomen,TotalLiteMen,  TotalLiteWomen,TotalIlliteMen,TotalIlliteWomen    clrscr();  TotalPerson = 80000;  printf(“Total Person: %ld”,TotalPerson);  TotalMen = 52 \* TotalPerson / 100;  printf(“Total Number of Men: %ld”,TotalMen);  TotalLitePerson = 48 \* TotalPerson / 100;  printf(“Total number of Literate Person: %ld”,TotalLitePerson);  TotalLiteMen = 35 \* TotalPerson / 100;  printf(“Total Number of Literate Men: %ld”,TotalLiteMen);  TotalIlliteMen = TotalMen – TotalLiteMen;  printf(“Total Number of Illiterate Men: %ld”,TotalIlliteMen);  TotalWomen = TotalPerson – TotalMen;  printf(“Total Number of Women: %ld\n”,TotalWomen);  TotalLiteWomen = TotalLitePerson – TotalLiteMen;  printf(“Total Number of Literate Women: %ld\n”,TotalLiteWomen);  TotalIlliteWomen = TotalWomen – TotalLiteMen;  printf(“Total Number of Illiterate Women: %ld\n”,TotalIlliteWomen);  getch();  } |
| **Output** | Text  Description automatically generated |
| **Program: 1.3** | A cashier has currency notes of denominations 10, 50 and 100. If the amount to be withdrawn is input through the keyboard in hundreds, find the total number of currency notes of each denomination the cashier will have to give to the withdrawer. |
| **Flowchart:** | Input amount 1, amount 2,  amount 3.  Print the number of hundred, fifty and ten notes if 780 Rs. Is the total amount. |
| **Algorithm:** | * Step 1: Start * Step 2: Input Amount 1 = 780, Amount 2 = 780 % 100, Amount = 80 % 50 * Step 3: Print the number of hundred notes, fifty notes, and ten notes if 780 Rs. Is the total amount. * Step 4: Stop. |
| **Code:** | #include<stdio.h>  #include<conio.h>  int main();  {    int amount;  printf(“Enter the amount to be withdrawn (in hundreds): ”);  scanf(“%d”,&amount);  printf(“\n\nRequired notes of Rs. 100 : %d”, amount / 100);  printf(“\n\nRequired notes of Rs. 50 : %d”, (amount % 100) / 50);  printf(“\n\nRequired notes of Rs. 10 : %d”, (((amount % 100) % 50 ) / 10));  printf(“\n\nAmount still remaining Rs. : %d”, (((amount % 10) % 50) % 10);  return 0;  } |
| **Output:** | Text  Description automatically generated |

Sign: Grade: