PRACTICAL – 4

PROGRAM -1

AIM- Write C Program to Make programs using If statements.

{GIVEN NUMBER IS GREATER THAN}

CODE:-

|  |
| --- |
| #include<stdio.h>  void main()  {  printf("\n HARSH D\n");  int a;  printf("Enter The Number = ");  scanf("%d",&a);  if(a > 2)  {  printf("%d is Greater than 2 ",a);  }  return 0;  } |

OUTPUT:-

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PROGRAM -2

AIM- Write C Program to Make programs using If-else statements.

{PROVE THE GIVEN ANGLE FORM A TRIANGLE}

CODE:-

|  |
| --- |
| #include<stdio.h>  void main()  {  printf("\n HARSH D\n");  int a,b,c,d;  printf("Enter Angle\_1 =");  scanf("%d",&a);  printf("Enter Angle\_2 =");  scanf("%d",&b);  printf("Enter Angle\_3 =");  scanf("%d",&c);  d=a+b+c;  if (d==180)  {  printf("THIS WILL FORM TRIANGLE");  }  else  {  printf("ENTER VALID ANGLE");  }  } |

OUTPUT:-

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PROGRAM -3

AIM- Write C Program to Make programs using If-else-if statements.

{GRADE SYSTEM}

CODE:-

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| --- |
| #include <stdio.h>  int main()  {  printf("\n HARSH D\n");  float a;  printf("ENTER YOUR PERCENTAGE = ");  scanf("%f", &a);  if (a >= 90) {  printf("A Grade\n");  } else if (a >= 70) {  printf("B Grade\n");  } else if (a >= 50) {  printf("C Grade\n");  } else {  printf("F Grade\n");  }  return 0;  } |

OUTPUT:-

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PROGRAM -4

AIM- Write C Program to Make programs using Nested If statements.

{GRADE SYSTEM}

CODE:-

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| --- |
| #include<stdio.h>  void main()  {  printf("\n HARSH D\n");  int a;  printf("Enter A Number = ");  scanf("%d",&a);  if (a >= 0)  {  printf("The Given Number %d Is Positive(+ve)",a);  }  else  {  if (a < 0)  {  printf("The Given Number %d Is Negative(-ve)",a);  }  else  {  printf("The Given Number %d Is Zero(0)",a);  }  }  return 0;  } |

OUTPUT:-

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| --- |
|  |

PROGRAM -5

AIM- Write C Program to Make programs using Break statements.

{PRINT FROM 0 TO 5 AND BREAK}

CODE:-

|  |
| --- |
| #include<stdio.h>  #include<stdlib.h>  void main ()  {  printf("\n HARSH D\n");  int i;  for(i = 0; i<10; i++)  {  printf("\n %d ",i);  if(i == 5)  break;  }  printf("\n Came outside of loop i = %d",i);  } |

OUTPUT:-

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| --- |
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PROGRAM -6

AIM- Write C Program to Make programs using Continue statements.

{PRINT FROM 0 TO 5 AND CONTINUE}

CODE:-

|  |
| --- |
| #include<stdio.h>  #include<stdlib.h>  void main ()  {  printf("\n HARSH D\n");  int i;  for(i = 0; i<10; i++)  {  printf("\n %d ",i);  if(i == 5)  continue;  }  printf("\n Continued loop i = %d",i);  } |

OPUTPUT:-

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PROGRAM -7

AIM- Write C Program to Make programs using Goto statements.

{TABLE}

CODE:-

|  |
| --- |
| #include <stdio.h>  int main()  {  printf("\n HARSH D\n");  int num,i=1;  printf("Enter the number whose table you want to print? = ");  scanf("%d",&num);  table:  printf("%d x %d = %d\n",num,i,num\*i);  i++;  if(i<=10)  goto table;  } |

OUTPUT:-

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PROGRAM -8

AIM- Write C Program to Make programs using Switch statements.

{SIMPLE GUESS THE NUMBER}

CODE:-

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| --- |
| #include <stdio.h>  int main()  {  printf("\n HARSH D\n");  int num = 2;  switch (num)  {  case 1:  printf("Value is 1\n");  break;  case 2:  printf("Value is 2\n");  break;  case 3:  printf("Value is 3\n");  break;  default:  printf("Value is not 1, 2, or 3\n");  break;  }  return 0;  } |

OUTPUT:-

|  |
| --- |
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PROGRAM -9

AIM- MAKE THIS PATTERN:-



CODE:-

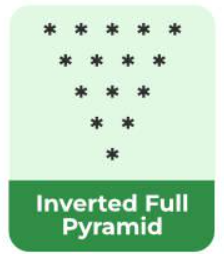
|  |
| --- |
| #include <stdio.h>  int main()  {  printf("\nHARSH D \n");  int n, i, j, num;    printf("Enter the number of rows: ");  scanf("%d", &n);  num = 1;  for (i = 0; i < n; i++) {  for (j = 0; j < n - i - 1; j++) {  printf(" ");  }  for (j = 0; j < i; j++) {  printf("\* ", num);  num++; }  printf("\n");  }  } |

OUTPUT:-

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| --- |
|  |

PROGRAM -10

AIM- MAKE THIS PATTERNS:-



CODE:-

|  |
| --- |
| #include <stdio.h>  int main()  {  printf("\n HARSH D \n");  int rows, i, j;  // Input the number of rows  printf("Enter the number of rows: ");  scanf("%d", &rows);  // Print the inverted full pyramid  for (i = rows; i >= 1; --i) {  // Print leading spaces  for (j = 0; j < rows - i; ++j) {  printf(" ");  }  // Print asterisks  for (j = 1; j <= 2 \* i - 1; ++j) {  printf("\*");  }  // Move to the next line  printf("\n");  }  return 0;  } |

OUTPUT:-

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PROGRAM -11

AIM- MAKE THIS PATTERN:-



CODE:-

|  |
| --- |
| #include <stdio.h>  int main()  {  printf("\n HARSH D\n");  int rows, i, j, space;  // Input the number of rows  printf("Enter the number of rows (must be odd): ");  scanf("%d", &rows);  if (rows % 2 == 0) {  printf("Please enter an odd number of rows for a symmetric diamond.\n");  return 1; // Exit the program with an error code  }  // Print the upper half of the diamond  for (i = 1; i <= rows; i += 2) {  // Print leading spaces  for (space = 0; space < (rows - i) / 2; ++space) {  printf(" ");  }  // Print asterisks  for (j = 1; j <= i; ++j) {  printf("\*");  }  // Move to the next line  printf("\n");  }  // Print the lower half of the diamond (excluding the center row for an odd number of rows)  for (i = rows - 2; i >= 1; i -= 2) {  // Print leading spaces  for (space = 0; space < (rows - i) / 2; ++space) {  printf(" ");  }  // Print asterisks  for (j = 1; j <= i; ++j) {  printf("\*");  }  // Move to the next line  printf("\n");  }  return 0;  } |

OUTPUT:-

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PROGRAM -12

AIM- MAKE THIS PATTERN:-



CODE:-

|  |
| --- |
| #include <stdio.h>  int main() {  printf("\n HARSH D\n");  int n;  printf("Enter number of rows: ");  scanf("%d", &n);  // Upper half of the diamond  for(int i = 1; i <= n; i++) {  // Leading spaces  for(int j = i; j <= n; j++) {  printf(" ");  }  // Asterisks and spaces  for(int k = 1; k <= 2 \* i - 1; k++) {  if(k == 1 || k == (2 \* i - 1)) {  printf("\*");  } else {  printf(" ");  }  }  printf("\n");  }  // Lower half of the diamond  for(int i = n - 1; i >= 1; i--) {  // Leading spaces  for(int j = n; j >= i; j--) {  printf(" ");  }  // Asterisks and spaces  for(int k = 1; k <= 2 \* i - 1; k++) {  if(k == 1 || k == (2 \* i - 1)) {  printf("\*");  } else {  printf(" ");  }  }  printf("\n");  }  return 0;  } |

OUTPUT:-

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