**Basic Introductory Problems**

**(Total 10 questions)**

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| **SL** | **Problem statement** | **Difficulty levels** |
|  | Program that will print “Hello World”.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | #include<stdio.h>  int main()  {  printf("Hello World");  return 0;  } | Hello World | | \* |
|  | Program that will use newline/tab and print the following segment:   |  |  | | --- | --- | | **Sample input** | **Sample output** | | #include<stdio.h>  int main()  {  printf("Hello World.\n");  printf("This is my first program.\t C is fun.");  return 0;  } | Hello World.  This is my first program. C is fun. | | \* |
|  | Program that will print the following segment:   |  |  | | --- | --- | | **Sample input** | **Sample output** | | #include<stdio.h>  int main()  {  printf("The question is-\" how to write a \\comment/ in c programming language?\"");  return 0;  }  OR  #include <stdio.h>  int main()  {  char a,b,c;  a= '\"' ;  b= '\\' ;  c= '//' ;  printf("The question is- %cHow to write a %ccomment%c in C programming language?%c", a,b,c,a);  return 0;  } | The question is - “How to write a \comment/ in C programming language?” | | \* |
|  | Program that will declare an integer, a floating point number, a character. Then it will initialize them with values and print those values.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | #include<stdio.h>  int main()  {  int num1=5;  float num2=3.141593;  char ch= 'a';  printf("The integer value:%d\n", num1);  printf("The floating point value:%f\n", num2);  printf("The character value:%c\n", ch);  return 0;  } | The integer value: 5  The floating point value: 3.141593  The character value: a | | #include<stdio.h>  int main()  {  int num1=100;  float num2=1.618000;  char ch= 'z';  printf("The integer value:%d\n", num1);  printf("The floating point value:%f\n", num2);  printf("The character value:%c\n", ch);  return 0;  } | The integer value: 100  The floating point value: 1.618000  The character value: z | | \* |
|  | Program that will do the followings:   1. Declare a variable uninitialized 2. Declare and initialize a variable in one statement 3. Declare and initialize multiple variables with different values in one statement 4. Declare and initialize multiple variables with the same value in one statement | \* |
|  | Program that will take your age in year(s) as input and print it.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 20  #include<stdio.h>  int main()  {  int age1=20;  int age2=21;  printf("My age is:%d\n", age1);  printf("My age is:%d", age2);  return 0;  } | My age is: 20 | | 21 | My age is: 21 | | \* |
|  | Program that will receive the values of an integer, a floating point number, a character from the keyboard and print those values.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | 5  3.141593  A  #include<stdio.h>  int main()  {  int x;  float y;  char ch;  printf("Enter an integer:");  scanf("%d", &x);  printf("The integer value:%d\n", x);  printf("Enter an float:");  scanf("%f", &y);  printf("The integer value:%.2f\n", y);  printf("Enter an charecter:");  fflush(stdin); //enter k jeno input hishebe na nai  scanf("%c", &ch);  printf("The charecter value:%c", ch);  return 0;  } | The integer value: 5  The floating point value: 3.141593  The character value: a | | 100 1.618 z | The integer value: 100  The floating point value: 1.618000  The character value: z | | \* |
|  | Program that will take three integer numbers from keyboard but assign only the first and last inputs to variables and skip any assignment of the middle one.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | #include<stdio.h>  int main()  {  int firstvalue, secondvalue, thirdvalue;    printf("Enter three numbers:");  scanf("%d %d", &firstvalue, &thirdvalue);    printf("First value=%d\n", firstvalue);  printf("Last value=%d\n", thirdvalue);  return 0;  } | First Value = 20, Last Value = 100 | | 33 75 22 | First Value = 33, Last Value = 22 | | \*\* |
|  | Program that will declare a variable from each data type: double, boolean. Then it will initialize them with values and print them.   |  |  | | --- | --- | | **Sample input** | **Sample output** | |  | The double value: 3.140000e+00  The boolean value: 1 | |  | The double value: 1.618039  The boolean value: 0 | | \* |
|  | Program that will declare a variable from each data type: long int**,** long long int**,** long double, short int. Then it will initialize them with values and print them.   |  |  | | --- | --- | | **Sample input** | **Sample output** | | #include <stdio.h>  int main() {  // Declare variables  long int longIntVariable;  long long int longLongIntVariable;  long double longDoubleVariable;  short int shortIntVariable;  // Initialize variables  longIntVariable = 2147483647;  longLongIntVariable = 9223372036854775807;  longDoubleVariable = 1.1E+4932;  shortIntVariable = 32767;  // Print the values  printf("The long int value: %ld\n", longIntVariable);  printf("The long long int value: %lld\n", longLongIntVariable);  printf("The long double value: %LE\n", longDoubleVariable);  printf("The short int value: %d\n", shortIntVariable);  return 0;  } | The long int value: 2147483647  The long long int value: 9223372036854775807  The long double value: 1.1E+4932  The short int value: 32767 | |  | The long int value: -2,147,483,648  The long long int value: -9223372036854775808  The long double value: 3.4E-4932  The short int value: -32768 | | \*\* |