

C Language Community LIVE Classes
Assignment-6

1. Write a program to print size of an int, a float, a char and a double type variable

```
Ans. #include<stdio.h>
#include<conio.h>
Int main ()
{

    Int inttype;
    float float type;
    char chartype;
    double doubletype;

    // sizeof evaluates the size of a variable
    printf("Size of int: %zu bytes\n", sizeof(intType));
    printf("Size of float: %zu bytes\n", sizeof(floatType));
    printf("Size of double: %zu bytes\n", sizeof(doubleType));
    printf("Size of char: %zu byte\n", sizeof(charType));

    getch();
}
```

2. Write a program to find last digit of a given number

```
Ans. #include <stdio.h>

int main()

{

    int n, sum=0, lastDigit;

    printf("Enter number = ");

    scanf("%d", &n);

    // Find last digit of a number

    lastDigit = n % 10;

    printf(" last digit = %d\n",lastDigit);

    return 0;

}
```

3. Write a program to find first digit of a given three digit number

```
Ans. #include <stdio.h>
int main()
{
    int n, sum=0, firstDigit, ;
    printf("Enter number = ");
    scanf("%d", &n);
```

```
//Find the first digit by dividing n by 10 until n greater then 10
while(n >= 10)
{
    n = n / 10;
}
firstDigit = n;
printf("first digit = %d\n", firstDigit);
return 0;
}
```

4. Write a program to find middle digit of a given three digit number
Ans.

5. Write a program to swap values of two int variables

Ans. #include <stdio.h>
int main()
{
int x, y, t; // x and y are the swapping variables and t is another variable
printf("Enter the value of X and Y\n");
scanf("%d%d", &x, &y);
printf("before swapping numbers: %d %d\n", x, y);
/*swapping*/
t = x;
x = y;
y = t;
printf("After swapping: %d %d", x, y);
return 0;
}

6. Write a program to swap values of two int variables without using third variable
Ans. #include<stdio.h>

```
int main()
{
int a=10, b=20;
printf("Before swap a=%d b=%d",a,b);
a=a+b; //a=30 (10+20)
b=a-b; //b=10 (30-20)
a=a-b; //a=20 (30-10)
printf("\nAfter swap a=%d b=%d",a,b);
return 0;
}
```

7. Write a program to make the last digit of a number stored in a variable as zero.
(Example - if x=2345 then make it x=2340)

Ans.

8. Write a program to input a number from the user and also input a digit. Append a digit in the number and print the resulting number. (Example - number=234 and digit=9 then the resulting number is 2349)

9. Assume price of 1 USD is INR 76.23. Write a program to take the amount in INR and convert it into USD.

Ans. #include <stdio.h>

```
int main(void) {  
    float rupees;  
  
    printf("Please enter rupees:");  
    scanf("%f", &rupees);  
  
    float dollars = rupees / 76.23;  
  
    printf("%f Dollars", dollars);  
}
```

10. Write a program to take a three digit number from the user and rotate its digits by one position towards the right.

Ans.