

# Assignment 2 Solutions

**Q.1** //Write a program to print unit digit of a given number.

//Solution:

```
#include<stdio.h>

int main(){
    int num;
    printf("Enter a number:");
    scanf("%d",&num);
    printf("unit pace digit of %d is %d",num,num%10);
    return 0;
}
```

**Q.2** //Write a program to print a given number without its last digit.

//Solution:

```
#include<stdio.h>

int main(){
    int num;
    printf("Enter a number:");
    scanf("%d",&num);
    printf("number without its last digit id %d",num/10);
    return 0;
}
```

**Q.3** //Write a program to swap values of two int variables

//Solution:

```
#include<stdio.h>

int main(){
    int num1, num2,num3=0;
    printf("Enter first number number:");
    scanf("%d",&num1);
    printf("Enter second number number:");
```

```

scanf("%d",&num2);
num3=num1;
num1=num2;
num2=num3;
printf("After swapping: \n\t\tfirst number is: %d \n\t\tSecond number is: %d", num1
,num2);
return 0;
}

```

**Q.4** //Write a program to swap values of two int variables without using a third variable.

//Solution:

```

#include<stdio.h>

int main(){
    int num1,num2;
    printf("Enter first number:");
    scanf("%d",&num1);
    printf("Enter second number:");
    scanf("%d",&num2);
    num1=num1+num2;
    num2=num1-num2;
    num1=num1-num2;
    printf("After swapping first number is: %d and second number is: %d",num1, num2);
    return 0;
}

```

**Q.5** // Write a program to input a three-digit number and display the sum of the digits

//Solution:

```

#include<stdio.h>
int main(){
    int i,num1,num2,sum=0;
    printf("Enter a number:");
    scanf("%d",&num1);
    for(i=0;num1;i++)
    {
        num2=num1%10;
        sum=sum+num2;
        num1=num1/10;
    }
    printf("%d",sum);
    return 0;
}

```

**Q.6** //Write a program which takes a character as an input and displays its ASCII code.

```
//Solution:
#include<stdio.h>
int main()
{
    char character;
    printf("Enter a Character:");
    scanf("%c",&character);
    printf("ASCII Code of the character is %d ",character);
    return 0;
}
```

**Q.7** //Write a program to find the position of first 1 in LSB.

```
//Solution:
#include<stdio.h>

int main(){
    int num;
    printf("Enter a number:");
    scanf("%d",&num);
    if(num&1==1)
        printf("LSB of the entered number is 1");
    else
        printf("LSB of entered number is not equal to 1");
    return 0;
}
```

**Q.8** //Write a program to check whether the given number is even or odd using a bitwise

```
//operator.
//Solution:
```

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

```
int main(){
```

```

int num;
printf("Enter a number:");
scanf("%d",&num);
if(num&1)
{
    printf("%d is a odd number",num);
}
else{
    printf("%d is a even number",num);
}
return 0;
}

```

**Q.9** //Write a program to print size of an int, a float, a char and a double type variable

//Solution:

```

#include<stdio.h>
int main(){
    int id;
    char grade;
    float percentage;
    double average;

    printf("%d",sizeof(id));
    printf("\n%d",sizeof(grade));
    printf("\n%d",sizeof(percentage));
    printf("\n%d",sizeof(average));
    return 0;
}

```

**Q.10** /\*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)\*/

//Solution:

```

#include<stdio.h>
int main(){
    int x=2345;
    printf("\nBefore value of x is:%d and After value is:%d",x,(x/10)*10);
    return 0;
}

```

**Q.11** /\*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)\*/

//Solution:

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

```
int main(){
    int num,num2;
    printf("Enter two number's :");
    scanf("%d%d",&num,&num2);
    printf("First entered number is:%d and Second entered number is:%d \nThere combination is %d",num,num2,(num*10)+num2);
    return 0;
}
```

**Q.12** /\*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)\*/

//Solution:

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

```
int main(){
    float USD=75.23,rupee,totalUSD;
    printf("Enter the amount in rupees:");
    scanf("%f",&rupee);
    totalUSD=rupee/USD;
    printf("The %f amount of indian rupee is equal to %-2f of Dollar",rupee,totalUSD);
    return 0;
}
```

**Q.13** /\*Write a program to take a three-digit number from the user and rotate its digits by

one position towards the right.\*/

//Solution:

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

```
int main(){
    int num,shift=0;
    printf("Enter three digit number:");
    scanf("%d",&num);
    for(int i=0;num;i++)
    {
        shift=shift+num%10;
        num=num/10;
        shift=shift*10;
    }
    printf("%d",shift/10);
    return 0;
}
```