

180:

```
if (b < a[i])
```

```
    b = a[i],  
}
```

```
printf ("The longest number is. %d", b);  
getch();
```

```

for (int i = 0; i < size; i++)
{
    b[i] = a[i];
}

scanf("%d", &a[0]);
printf("Enter how many nos you want to share: ");
clrscr();
int size;
int a[20];
}

void main()
{
    #include <conio.h>
    #include <stdio.h>
    source code:-
```

(6) print the largest number.

(7) use if statement to check if the numbers are greater than or less than . for loop for condition if e and is false

(8) use for loop take input of the value.

(9) initialise a variable i and array of int datatype.

(10) include the required header file and clear the screen.

(11) array of numbers.

(12) write a program to find the largest of three numbers in an array.

#include <stdio.h>

main()
{
 int a[3], i, max;
 for (i = 0; i < 3; i++)
 {
 printf("Enter the %d no element -> ", i + 1);
 scanf("%d", &a[i]);
 }
 max = a[0];
 for (i = 1; i < 3; i++)
 {
 if (a[i] > max)
 max = a[i];
 }
 printf("Largest number is %d", max);
}

```

        } for (int i = 0; i < size; i++)
        {
            cout << arr[i] << " ";
        }
    }

    cout << endl << "Enter how many nos you want to share: ";
    cin >> n;
    cout << endl << "Enter the numbers: ";
    for (int i = 0; i < n; i++)
    {
        cout << "No. " << i+1 << ": ";
        cin >> arr[i];
    }
}

int main()
{
    cout << endl << "Program to find the largest number in an array: ";
    cout << endl << "#include <iostream.h>";
    cout << endl << "Source code:-";
    cout << endl << "#include <stdlib.h>";
    cout << endl << "#include <conio.h>";
    cout << endl << "Void main()";
    cout << endl << "{";
    cout << endl << "clrscr();";
    cout << endl << "int arr[100];";
    cout << endl << "int i, j, max;";
    cout << endl << "cout << endl << "Enter the numbers: ";
    cout << endl << "for (i = 0; i < 100; i++)";
    cout << endl << "    cin >> arr[i];";
    cout << endl << "max = arr[0];";
    cout << endl << "for (i = 1; i < 100; i++)";
    cout << endl << "    if (arr[i] > max)";
    cout << endl << "        max = arr[i];";
    cout << endl << "cout << endl << "The largest number is: ";
    cout << endl << "cout << endl << max;
}

```

- 6) write a program to find the largest of three numbers in an array.
- 7) include the required header file and clear the screen.
- 8) include a variable and empty string.
- 9) use for loop take input of the value.
- 10) initialize a variable and empty string.
- 11) use conio.h for condition if = e and if else
- 12) use if statement to check if the numbers are greater than or equal to the previous number.
- 13) use if statement to check if the numbers are greater than or equal to the current number.
- 14) use if statement to check if the numbers are greater than or equal to the previous number.
- 15) print the largest number.

035

write a program to obtain following output

2 3
4 5 6
7 8 9 10
11 12 13 14 15

```
#include <stdio.h>  
#include <conio.h>  
void main()
```

```
{
```

```
int i, j, k = 1;
```

```
ANSWER,
```

```
for (j = 1; k = 5; j++)
```

```
{
```

```
for (i = 1; i < j; i++)
```

```
{
```

```
printf("%d.%d.%d", k);
```

```
k++;
```

```
}
```

```
printf("\n");
```

```
getch();
```

```
}
```

Algorithm:

Step 1: Initialize three variable with datatype integer.

Step 2: Use nested for conditional statement and check if it is less than or equal to 5 and increment it by 1

steps: use another for conditional statement which starts from 1 and less than equal to previous conditional value and increment by 1

Step 4: print n-variable (k) with integer datatype and increment it by 1.

Step 5: Stop.

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write a program to obtain following output

1
2
3
3
3
4
5
5
5
5

```
Success code : 0
#include <stdio.h>
#include <conio.h>
void main()
{
    int i, j, k;
    clrscr();
    for(i=1; i<=j; i++)
    {
        printf("%d", i);
        for(j=i; j<=k; j++)
            printf(" ");
        printf("\n");
    }
}
```

80
output
*
**

034

write a program to obtain following output

*
* *
* * *
* * * *
* * * *

Algorithm

Step 1: Initialise two variable with datatype integer

Step 2: use nested conditional statement and check if it is less than equal to 5 & increment by 1

Step 3: In outer condition check value starts from 18 less than equal to previous conditional variable & increment by 1

Step 4: print * code

#include <stdio.h>
#include <conio.h>
void main()

{ int i, j;

char c[5];
for (i = 1; i <= 5; int i++)

{

for (j = 1; j <= i; j++)

{

printf("*");

}

printf("\n");

}

180

write a program to show the number is Armstrong number or not

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int n,dig,sum=0,t;
    clrscr();
    printf("Enter number:");
    scanf("%d",&n);
    t=n;
    while(n>0)
    {
        dig=n%10;
        sum=sum+(dig*dig*dig);
        n=n/10;
    }
    if(t==sum)
        printf("%d is Armstrong",t);
    else
        printf("%d is not Armstrong",t);
    getch();
}
```

initialization

032

condition

stop

statement
ini/dec

output:

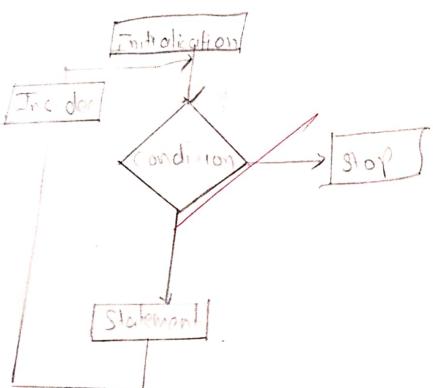
Enter number: 53
53 is armstrong number

Enter number: 20

20 is not a Armstrong number

output

2 4 6 8 10 12 14 16 18 20
22 24 26 28 30 32 34 36 38 40
42 44 46 48 50



Practical - No - 4

031

Q) Program to print number upto 50

```
#include <iostream>
#include <conio.h>
void main()
{
    int i,
    clrscr();
    for (i = 2; i <= 50; i += 2)
    {
        printf ("%d\n", i);
    }
    getch();
}
```

Algorithm

- 1) start
- 2) include appropriate libraries
- 3) use for conditional loop to iterate the declared variable till 50
- 4) increment the iterating variable by 1.
- 5) print the output

Q30
a) Aim : write a C program to find if the entered character is vowel or consonant

→ source code:

```
#include < stdio.h>
#include < conio.h>
void main()
{
    char y;
    clrscr();
    printf("Enter the character:");
    scanf("%c", &y);
    if (y == 'a' || y == 'e' || y == 'i' || y == 'o' || y == 'u' || y == 'A' || y == 'E' || y == 'I' || y == 'O' || y == 'U')
        printf("Entered character is vowel");
    else
        printf("Entered character is consonant");
    getch();
}
```

Output:
Enter the character : a
Entered character is vowel

Q30

Enter the character : b
Entered character is consonant

Jyoti
21/01/2020

output
850
Enter a number: 8
Even number
Enter a number: 7
odd number

029
b) Aim: write a C program to find odd & even.
→ source code:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int num;
    clrscr();
    printf("Enter a number:");
    scanf("%d", &num);
    if ((num % 2) == 0)
    {
        printf("Even number:");
        if ((num % 2) != 0)
            printf(" odd number");
    }
    getch();
}
```

580.5 Practical no:3

a) Aim : write a C program to find whether the entered year is leap year or not

→ source code:

```
#include <stdio.h>
#include <conio.h>
void main()
{
    int year;
    clrscr();
    printf("Enter a year:");
    scanf("%d", &year);
    if (year % 4 == 0)
    {
        printf("Entered year is leap year");
    }
    else
    {
        printf("Not a leap year");
    }
    getch();
}
```

Output :

Enter a year : 2016
Enter year is leap year.

Enter a year : 2017
Not a leap year

028

No

Output

value of a is: 3

value of b is: 4

Greatest number is: 4

027

values: (x==y);
printf (" value %i is %i.d \n",
values);
getch();
}

b) Aim: write a C program that will demonstrate the use of ternary operators

→ Source code:

```
#include < stdio.h>  
#include < conio.h>  
void main()  
{  
    int a, b, x;  
    clrscr();  
    printf (" value of a is ");  
    scanf ("%d", &a);  
    printf (" value of b is ");  
    scanf ("%d", &b);  
    x = (a > b)? a : b;  
    printf (" Greatest number is: %d \n", x);  
    getch();  
}
```

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```
    div);  
    getch();  
}
```

b) Logical operators

→ source code

```
#include <stdio.h>  
#include <conio.h>  
  
void main()  
{  
    int x, y, z, val1, val2, val3, val4, val5;  
    clrscr();  
    printf("Enter 1st value:");  
    scanf("%d", &x);  
    printf("Enter 2nd value:");  
    scanf("%d", &y);  
    printf("Enter 3rd value:");  
    scanf("%d", &z);  
    value1: (x < y) && (z > y);  
    printf("value1: %d\n", val1);  
    value2: (x > y) && (z < y);  
    printf("value2: %d\n", val2);  
    value3: (x <= y) && (val3);  
    printf("value3: %d\n", val3);  
    value4: !(x == y);  
    printf("value4: %d\n", value4);  
}
```

Output

Enter 1st value: 9
Enter 2nd value: 8
Enter 3rd value: 2

value 1 is: 0
value 2 is: 1
value 3 is: 1
value 4 is: 0
value 5 is: 1

026

Q1

Output

Enter first no.: 10

Enter second no.: 2

Addition of two no's is : 12

Subtraction of two no's is : 8

Multiplication of two no's: 20

Division of two no's is : 5

Practical no:-2 025

~~Area = Area of a circle~~
 Aim: write a C program to show the different type of
 operators

a) Arithmetic operators

→ source code:

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

void main()

```
float n1, n2, add, sub, mul, div;
clrscr();
printf (" Enter first no., \n");
scanf ("%f", &n1);
printf (" Enter second no.: \n");
scanf ("%f", &n2);
add = n1 + n2;
printf (" Addition of two no's is: %f \n", add);
sub = n1 - n2;
printf (" Subtraction of two no's is: %f \n", sub);
mul = n1 * n2;
printf (" multiplication of two no's is: %f \n", mul);
div = n1 / n2;
printf (" Division of two no's is: %f \n",
```

```
printf("your grade is: %c\n", grade);
printf("your percentage is: %.f\n", per);
printf("your roll number is: %d\n", roll);
printf("your name is: %s\n", name);
getch();
```

No

Output

Enter radius : 5.0
Area of circle : 78.54

021

Program 2: Area of circle

Source code:-
#include <stdio.h>
#include <conio.h>
void main()

```
float pi, r, a;
clrscr();
pi = 3.142;
printf("Enter radius:");
scanf("%f", &r);
a = pi * r * r;
printf("Area of circle: %.2f", a);
getch();
```

850

```
printf("Your grade is: %c\n", grade);
printf("Your percentage is: %.f\n", per);
printf("Your roll number is: %d\n", roll);
printf("Your name is: %s\n", name);
getch();
```

Output

Enter radius: 5.0
Area of circle: 78.550000

024

Program 2: Area of circle

Source code:-

#include <stdio.h>
#include <math.h>

void main()

```
float pi, r, a;
clrscr();
pi = 3.14159;
printf("Enter radius:");
scanf("%f", &r);
a = pi * r * r;
printf("Area of circle: %.2f", a);
getch();
```

No

Aim: write a program to understand the basic datatype of input output

Source code:-

```
#include <stdio.h>
#include <conio.h>
Void main()
{
    int soil;
    char name[40];
    long int mob;
    char grade;
    char odd;
    float pix;
    clrscr();
    printf ("**** * Demonstration of datatype ***\n");
    printf ("Enter your roll number : \n");
    scanf ("%d", &roll);
    printf ("Enter your name : \n");
    scanf ("%s", name);
    printf ("Enter your mobile number : \n");
    scanf ("%ld", &mob);
    printf ("Enter your grade : \n");
    scanf ("%c", &grade);
    printf ("Enter your percentage : \n");
    scanf ("%f", &per);
```

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Step 1: Define a function even with 0 parameters
elements can use the map method with help of lambda function
and two arguments as they are same

Step 2: Define a function even with 0 parameters
elements can use the map method with help of lambda function
and add two arguments as they are same

Step 3: Define a function even with 0 parameters
elements can use the map method with help of lambda function
using conditional statements & check whether numbers
are even and add two arguments as they are same

def even(x):

listnum = [0, 1, 5, 7, 9, 11, 13, 15, 20, 10, 25]
listnum = list(map(lambda x: x * 1.5, listnum))

print(listnum)

def even(x):

if (x % 2 == 0):

return "Even"

else:

return "Odd"

odd numbers
class odd

def __init__(self):

self.num = 1

def __next__(self):

return self

def __next__(self):

num = self + num

return num

Q. 7 in range (5) when list(map(lambda x: x * 1.5, listnum))
print (value)
ans: [0,0]
[1,1]
[2,2]
[3,3]
[4,4]
[5,5]

new class next()

mytuple = ("banana", "orange", "apple")

myiter1 = iter(mytuple)

print(next(myiter1))

myiter2 = iter(mytuple)

print(next(myiter2))

myiter3 = iter(mytuple)

print(next(myiter3))

>>> banana

orange

apple

for loop

mytuple1 = ("Anil", "Anil", "Sunawane")

for x in mytuple1:

print(x)

>>> ~~Anil~~ Anil

Sunawane

square and cube.

def square(x):

y = x * x

return y

def cube(x):

z = x * x * x

return z

Step1 = [square, cube]