NIPUN LDS - 30605

quection 1

```c
#include<stdio.h>
int main()

{
    int m1,m2;
    printff("Enter the marks of module 1 & 2");
    scanf("%d %d",&m1,&m2);

    if(m1>=50 && m2>=50)
        printf("pass \n");
    else
        printf?("fall \n")


        }
```

quection 2

```c
#include<stdio.h>
        int main ()
    {
        int m;
        printf ("Enter a month number ");
        scanf ("%d", &m) ;
        switch (m)
        {
            case 1:printf ("January "); break;
            case 2:printf ("February "); break;
                //.........
            default:printf ("%d is not a valid month number ", m);
        }
    }
```

quection 3

```c
#include<stdio.h>
int main ()
{
    char ch;
    printf ("Enter a character ");
    scanf ("%c", &ch);
```

```
    switch (ch)
    {
        case 'a':printf ("a is a vowel "); break;
        case 'e':printf ("e is a vowel"); break;
            //....
        default:printf ("%c is not vowel ", ch);
    }


}
```

quection 4

```
#include<stdio.h>
int main ()
{
     int x=1;
   while(x<=100)

   {
     printf("%d", x);
        x++;

   }

}
```

quection 5

```
#include<stdio.h>
int main ()
{
     int x=10;
   while(x<=1000)

   {
     printf("%d", x);
        x= x+10;

   }

}
```

NAME : LDS NIPUN -30605

practical number 03
operators , if conditions

```
quection 1

#include <stdio.h>

int main()
{

  int number1, number2;
  int highest_number;


  printf("enter the first number: ");
  scanf("%d", &number1);
  printf("enter the second number: ");
  scanf("%d", &number2);


  if (number1 > number2) {
    highest number = number1;
  } else {
    highest number = number2;
  }


  printf("The highest number is %d\n", highest number);
  return 0;
}

quection 2

#include <stdio.h>

int main() {

  int number1, number2, number3;
  int largest number, smallest number;


  printf("Enter the 1st number: ");
  scanf("%d", &number1);
  printf("Enter the 2nd number: ");
  scanf("%d", &number2);
  printf("Enter the 3rd  number: ");
  scanf("%d", &number3);

  largest number = number1;
  smallest number = number1;

  if (number2 > largest number) {
    largest_number = number2;
```

```
  } else if (number2 < smallest number) {
    smallest_number = number2;
  }

  if (number3 > largestn umber) {
    largest_number = number3;
  } else if (number3 < smallest number) {
    smallest_number = number3;
  }


  printf("The largest number is %d\n", largest number);
  printf("The smallest number is %d\n", smallest number);

  return 0;
}

quection 3     2023/05/31  (practical number 03)


#include<stdio.h>

intmain()
{
  char EmpName[60];
  float bs, ns, inc;


  printf ("Enter employee name");

  printf("Enter your basic salary");
  scanf("%f", &bs);


 if (bs<5000)
{
  inc = bs*0.1;
 }
 else if (bs>=5000 && bs<10000){
  inc=bs*0.2;

 }
 else{
     inc=bs*0.15;
 }
 ns = bs+inc;
 printf("Employee name %c/n",empName);
 printf("New salary %2f /n",ns);
}
```

```
quection 4   2023/06/07


#include <stdio.h>

int main()
{
    float radius;
  float pi=3.14;
   printf("enter the radius: ");
   scanf("%f",&radius);

   printf("The diameater  is %.2f\n", 2*radius);
   printf("The circumfence is %.2f\n", 2*pi*radius);
   printf("The area is %.2f\n", pi*radius*radius);

}

quection 5  2023/06/07

#include <stdio.h>

int main()
{
  int numberone;
  int numbertwo;

  char answer='y';

 while(answer=='y') {
  printf("\n");
  printf("Enter number 1:");
  scanf("%d",&numberone);
  printf("Enter number 2:");
  scanf("%d",&numbertwo);

    if(numberone >0 && numbertwo >0)
    {
        if(numberone%numbertwo==0)
        {
        printf("%d is a multiplication of %d \n", numberone, numbertwo);
        }else{
        printf("%d is not a multiplication of %d \n", numberone, numbertwo);
        }
      answer='n';
    }else{
        printf("Cant enter 0 as a number, try again with different values \n");
```

```
      answer='y';
    }
    }
 }

quection 6

#include <stdio.h>

int main() {
  printf("The integer equivalen of A is: %d\n", ord('A'));
  printf("The integer equivalen of B is: %d\n", ord('B'));
  printf("The integer equivalen of C is: %d\n", ord('C'));
  printf("The integer equivalen of a is: %d\n", ord('a'));
  printf("The integer equivalen of b is: %d\n", ord('b'));
  printf("The integer equivalen of c is: %d\n", ord('c'));
  printf("The integer equivalen of 0 is: %d\n", ord('0'));
  printf("The integer equivalen of 1 is: %d\n", ord('1'));
  printf("The integer equivalen of 2 is: %d\n", ord('2'));
  printf("The integer equivalen of $ is: %d\n", ord('$'));
  printf("The integer equivalen of * is: %d\n", ord('*'));
  printf("The integer equivalen of + is: %d\n", ord('+'));
  printf("The integer equivalen of / is: %d\n", ord('/'));
  printf("The integer equivalen of the blank character is: %d\n", ord('/0'));
  return 0;
}

quection 7

#include <stdio.h>

int main() {

  int basic salary, service years, monthly sales;
  char city;
  float additional allowance, bonus;


  printf("Enter the basic salary:");
  scanf("%d", &basic_salary);
  printf("Enter the service years:");
  scanf("%d", &service_years);
  printf("Enter the monthly sales:");
  scanf("%d", &monthly_sales);
  printf("Enter the city [C for Colombo]");
  scanf(" %c", &city);

  if (service_years > 5) {
    additional allowance = basic salary * 0.1;
  } else {
    additional  llowance = 0;
```

```
  }

  if (city == 'C') {
    additional allowance += 2500;
  }


  if (monthly sales <= 25000) {
    bonus = monthly sales * 0.1;
  } else if (monthly sales <= 50000) {
    bonus = monthly sales * 0.12;
  } else {
    bonus = monthly sales * 0.15;
  }


  float grossr emuneration = basic_salary + additional allowance + bonus;


  printf("The gross remuneration is Rs. %.2f\n", gross remuneration);
  return 0;
}
```

END 03

Practical number 04
selection control structers

2023/06/16
quection 1

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

    int main()

    {int num;
     printf("enter an integer:");
     scanf("%d",&num);

     if(num % 2== 0){
         printf("%d is Even.\n" ,num);
    } else{
        printf("%d is Odd.\n",num);
        return 0;
```

```
    }
    }



quection 2

#include <stdio.h>

int main() {
  int num1, num2, operator;


  printf("Select an operation:\n");
  printf("1. Addition\n");
  printf("2. Subtraction\n");
  printf("3. Multiplivation\n");
  printf("4. Division\n");
  printf("5. Exit\n");


  scanf("%d", &operator);


  while (operator < 1 || operator > 5) {
    printf("Invalid input  Please enter a number between 1 and 5 \n");
    scanf("%d", &operator);
  }


  printf("enter the first number:");
  scanf("%d", &num1);

  printf("enter the second number:");
  scanf("%d", &num2);


  switch (operator) {
    case 1:
      printf("%d + %d = %d\n", num1, num2, num1 + num2);
      break;
    case 2:
      printf("%d - %d = %d\n", num1, num2, num1 - num2);
      break;
    case 3:
          printf("%d * %d = %d\n", num1, num2, num1 * num2):
      break;
    case 4:
      if (num2 == 0) {
        printf("Division by zero is not possible.\n");
      } else {
```

```
        printf("%d / %d = %d\n", num1, num2, num1 / num2);
      }
      break;
  }

  return 0;
}

quection 3

#include <stdio.h>

double circumference(double radius);
double area(double radius);
double volume(double radius);


int main() {


  double  radius;
  int choice;



  printf("what would you like to calculate?\n");
  printf("1. Circumference\n");
  printf("2. Area\n");
  printf("3. Volume\n");
  printf("Enter your choice: ");
  scanf("%d", &choice);


  if (choice < 1 || choice > 3) {
    printf("Invalid choice.\n");
    return 0;
  }


  printf("Enter the radius: ");
  scanf("%lf", &radius);


  switch (choice) {
    case 1:
      printf("The circumference is %.2f.\n", circumference[radius]);
      break;
    case 2:
      printf("The area is %.2f\n", area[radius]);
      break;
    case 3:
```

```
      printf("The volume is %.2f.\n", volume[radius]);
      break;
  }

  return 0;
}


double circumference(double radius) {
  return 2 * 3.14 * radius;
}

double area(double radius) {
  return 3.14 * radius * radius;
}

double volume(double radius) {
  return (4 / 3) * 3.14 * radius * radius * radius;

}


quection 4....


quection 5
#include <stdio.h>

int main()
{

  int month number;
  int number of days;

  printf("Enter a month number: ");
  scanf("%d", &month number);


  switch (month number)
  {
    case 1:
      number of days = 31;
      break;
    case 2:
      number of days = 28;
      break;
    case 3:
      number of days = 31;
      break;
    case 4:
      number of days = 30;
      break;
```

```
    case 5:
      number of days = 31;
      break;
    case 6:
      number of days = 30;
      break;
    case 7:
      number of days = 31;
      break;
    case 8:
      number of days = 31;
      break;
    case 9:
      number of days = 30;
      break;
    case 10:
      number of days = 31;
      break;
    case 11:
      number of days = 30;
      break;
    case 12:
      number of days = 31;
      break;
    default:
      printf("Invalid month number\n");
      break;
  }

  printf("The number of days in the month is %d \n", number of days);
  return 0;
}

End 04

practical 1 (06/19)

#include <stdio.h>

 int main()
 {
  int counter=1,odd=0,even=0,no;
  do
  {
   printf("enter %d number,counter",counter);
   scanf("%d",&no);
   if(no%2==0);
  } while (counter<=10);
 }

practical 1
```

```c
#include <stdio.h>

 int main()
 {
  int counter=1,oddc=0,evenc=0,no;
  do
  {
   printf("enter %d number,counter",counter);
   scanf("%d",&no);
   if(no%2==0)
     evenc=evenc++1;
    else
     oddc=oddc+1;

    counter++;

  } while (counter<=10);
  printf("Total number of odds %d \n",oddc);
  printf("Total number of evens %d \n",evenc);

 }

  practical 2

#include <stdio.h>

 int main()
 {
  int counter=1,oddc=0,evenc=0,no;
  for(counter=1;counter<=10;counter++);

  {
   printf("enter%d number",counter);
      scanf("%d",&no):
   if(no%2==0)
     evenc=evenc+1;

     oddc=oddc+1;


  }
  printf("total number of odds %d \n",oddc);
  printf("total number of evens %d \n",evenc);

 }

 loops (while,do while) 05
(06/21)
practical 05
Iteration control structure
```

```
quection 1

#include <stdio.h>

int main() {
  int i = 0;
  do {
    printf("%D\n", i);
    i++;
  } while ( i <= 100);

  return 0;
}

quection 2



#include <stdio\.h>

int main() {
    int marks[10], total = 0, i;
    float average;


    for (i = 0; i < 10; i++) {
        printf("Enter mark %d;\ ", i + 1);
        scanf("%d", &marks[i]);
    }


    for (i = 0; i < 10; i++)
    {
        total += marks[i];
    }
    average = total / 10.0;


    printf("total marks: %d\n", total);
    printf("average: %2f\n", average);


    printf("fail\n");

    printf("pass\n");
}

quection 3

#include <stdio.h>
```

```c
int main()
{
  int fac=,num=i;
  printf("Enter your number:");
  scanf("%d",&num);
  for(i=1;i<=num;i++)
  fac=fac*i;
  printf("Factorial of %d is:%d",num,fac\);




}
```

C (SUNDAY)

```c
#include <stdio.h>

int main()
{
       float prices[10],sum=0,avg,max=0;
       int i;


        for(i=0;i<10;i++)
       {

       printf("enter the price of product %d",i+1);
       scanf("%f",&prices  [i]);
       }


       for(i=0;i<10;i++)
       {
         sum=sum+prices[i];
         printf("The prices of product %d is% .2f \n",i+1,prices[i]);
         if(prices[i]>max)
         max=prices[i];

       }
      avg=sum/10.0;
      printf("The average prices is %.2f \n",avg);
      printf("The highest prices is %.2f\n",max);




}
```

quection 04 (lab)

```c
#include <stdio.h>

int main()
{
 int number, digit, sum = 0;

 printf("Enter the number: ");
 scanf("%d", &number);

 while (number > 0){
   digit = number % 10;
   sum += digit;
   number \= 10;
 }

 printf("The sum of the digits is %d\n", sum);

 return 0;
}
```

quection 5

```c
#include <stdio.h>

int main() {
  int number, reverse = 0, remainder;

  printf("Enter a number: ");
  scanf("%d", &number);

  do {
    remainder = number %10;
    reverse = reverse *10 + remainder;
    number = number /10;
  } while (number >0);

  printf("the reversed number is: %d\n", reverse);

  return 0;
}
```

quection 6

```c
#include <stdio.h>

int main() {
  int base, n,power = 1;

  printf("Enter base: ");
```

```c
  scanf("%d", &base);

  printf("Enter exponent: ");
  scanf("%d", &n);

  for (int i = 0; i < n; i++)
  {
    power *= base;
  }

  printf("%d raised to the powers of %d is: %d\n", base,n, power);

  return 0;
}
```

quection 7

```c
#include <stdio.h>

int main() {
  int i, a = 0, b = 1, c;
  printf("First 10 Fibonacci numbers: \n");
  for (i = 0; i < 10; i++)
  {
    c= a + b;
    printf("%d ", c);
    a = b;
    b = c;
  }
  printf("\n");
  return 0;
}
```

quection 9

```c
#include <stdio.h>

int main() {
  int num, temp, digit, sum = 0;

  printf("enter a number: ");
  scanf("%d", &num);

  temp = num;
  while (temp > 0) {
    digit = temp % 10;
    sum += digit * digit * digit;
    temp /= 10;
  }
```

```c
  if (sum == num)
  {
    printf("%d is an armstrong number .\n", num);
  } else {
    printf("%d is not an armstrong number  .\n", num);
  }

  return 0;
}


new one
05


#include <stdio.h>

int main() {
  int array[2];
  int i;
  int min_value = array[0];
  int max_value = array[0];
  int sum_value = 0;

  // Input the values to the array
  for (i = 0; i < 2; i++) {
    printf("Enter the value of element %d: ", i + 1);
    scanf("%d", &array[i]);
  }

  // Find the minimum value
  for (i = 0; i < 2; i++) {
    if (array[i] < min_value) {
      min_value = array[i];
    }
  }

  // Find the maximum value
  for (i = 0; i < 2; i++) {
    if (array[i] > max_value) {
      max_value = array[i];
    }
  }

  // Calculate the average
  for (i = 0; i < 2; i++) {
    sum_value += array[i];
  }
  float average = sum_value / 2.0;

  // Reverse the order of values
```

```c
  int temp = array[0];
  array[0] = array[1];
  array[1] = temp;

  // Print the results
  printf("The minimum value is: %d\n", min_value);
  printf("The maximum value is: %d\n", max_value);
  printf("The average is: %.2f\n", average);
  printf("The reversed array is: %d %d\n", array[0], array[1]);

  return 0;
}
```

muliti dimention array (9july,10)

```c
#include <stdio.h>

int main() {
  // declare the  arrray
   int arr [3][4];

  //input
   int r,c;
   for(r=0;r<3;r++)
   {
       for (c=0;c<4;c++)
       {
            printf("enter the value");
            scanf("%d",&arr[r][c]);


       }

   }
  //display
    for(r=0;r<3;r++)
   {
       for (c=0;c<4;c++)
       {
            printf("%d",arr[r][c]);
       }
      printf("\n");
   }
}

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

int main() {
  float ans, x;
  for(x=1;x<=100;x++)
  {
```

```
  ans=sqrt (x);
  printf("Square root value of %.2f% is %.2f \n",x,ans);


}

}



july/17 C

#include <stdio.h>


void findmax(int a, int b)
 {
     int max;
     if(a>b)
     max =a;
     else
     max=b;
     printf("the highest is %d \n",max);

 }

int main(){
// calling a function
findmax(80,70);

}


#include <stdio.h>


int findsum()
 {
     int a,b,sum;
     printf("ENTER TWO NUMBERS");
     scanf("%d,%d",&a,&b);
     sum=a+b;
return sum;
 }


int main(){
 printf("the sum is%d \n",findsum());

}
```

```c
#include <stdio.h>


int findage()
 {
     int age ,byear;
     printf("enter your birth year");
     scanf("%d",&byear);
     age=2023-byear;

return age;
 }


int main(){
 printf("the sum is%d \n",findage());

}


ex
#include <stdio.h>


int findavg(float a, float b)
 {
    float avg;
    avg=(a+b)/2;
return avg;
 }


int main(){
 printf("the average is%.2f \n",findavg (85,30));

}



#include <stdio.h>


int findmax(int a, int b,int c)
 {
   int max;
   max=a;
   if(b>max)
   max= b;
   if(c>max)
   max=c;
   return max;
```

```
 }


int main(){
 printf("the highest is%d \n",findmax (85,30,40));

}



#include <stdio.h>
void sdp(int a, int b) {
  int sum, dif, pro;
  sum = a + b;
  dif = a - b;
  pro = a * b;
  printf("The Sum Is %d\nThe Difference Is %d\nThe Product Is %d\n", sum, dif,
         pro);
}
int main() {
  int c, d;
  printf("Enter 2 Numbers - ");
  scanf("%d %d", &c, &d);
  sdp(c, d);
}
```