LIST OF PRACTICALS

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5. Program to use relational operators
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10. Program to use switch (break & continue)
11. Program to implement and use functions
12. Program to use arrays
13. Program to use structures

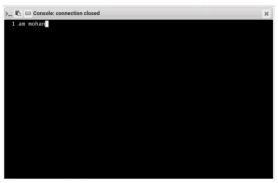
Practical Number 1

Practical name- Program to print a content using printf & puts.

Practical code:

```
// Program to print a content using printf
#include <stdio.h>
int main()
{
   printf("I am mohan");
   return 0;

}
```

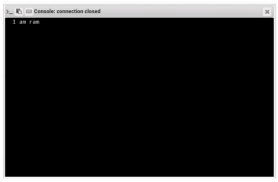
Output:




```
// Program to print a content using puts
#include <stdio.h>
int main()
{
  puts("I am ram");
 return 0;
```

}

Output:



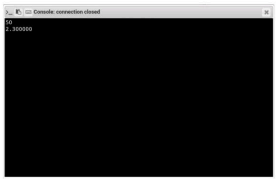
Practical Number 2

Practical name: Program to use different data types (int, char, float)

Practical code

```
include <stdio.h>
int main()
{
    int a=50;
    float b=2.30;
    char c=c;

   printf("%d\n",a);
   printf("%2f\n",b);
   printf("%c\n",c);

 }
```

Output



Practical Number 3

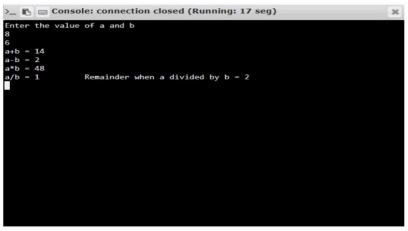
Practical name:Program to use arithmetic operators

Practical code

```
#include <stdio.h>
int main()
{
    int a,b,c;
    printf("Enter the value of a and b\n");
    scanf("%d%d", &a,&b);
```

```
    c = a+b;
    printf("a+b = %d \n",c);
    c = a-b;
    printf("a-b = %d \n",c);
    c = a*b;
    printf("a*b = %d \n",c);
    c = a/b;
    printf("a/b = %d \t",c);
    c = a%b;
    printf("Remainder when a divided by b = %d \n",c);
    return  0 ; }
```

Output



Practical Number 4

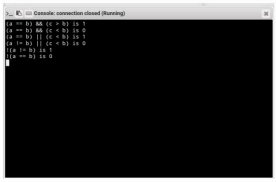
Practical name:Program to use logical operators

Practical code

```
#include <stdio.h>
int main()
{
    int a = 5, b = 5, c = 10, result;

    result = (a == b) && (c > b);
    printf("(a == b) && (c > b) is %d \n", result);

    result = (a == b) && (c < b);
    printf("(a == b) && (c < b) is %d \n", result);

    result = (a == b) || (c < b);
    printf("(a == b) || (c < b) is %d \n", result);

    result = (a != b) || (c < b);
    printf("(a != b) || (c < b) is %d \n", result);

    result = !(a != b);
    printf("!(a != b) is %d \n", result);
```

```
    result = !(a == b);
    printf("!(a == b) is %d \n", result);

    return 0;
}
```

Output



Practical Number 5

Practical name:Program to use relational operators

Practical code

```
#include <stdio.h>
int main()
{
    int a = 5, b = 5, c = 10;

    printf("%d == %d is %d \n", a, b, a == b);
    printf("%d == %d is %d \n", a, c, a == c);
    printf("%d > %d is %d \n", a, b, a > b);
    printf("%d > %d is %d \n", a, c, a > c);
    printf("%d < %d is %d \n", a, b, a < b);
    printf("%d < %d is %d \n", a, c, a < c);
    printf("%d != %d is %d \n", a, b, a != b);
    printf("%d != %d is %d \n", a, c, a != c);
    printf("%d >= %d is %d \n", a, b, a >= b);
    printf("%d >= %d is %d \n", a, c, a >= c);
    printf("%d <= %d is %d \n", a, b, a <= b);
    printf("%d <= %d is %d \n", a, c, a <= c);

    return 0;
}
```

Output

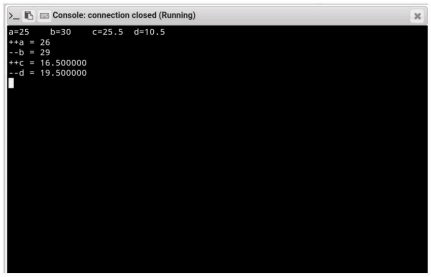
Practical Number 6

Practical name:Program to use increment and decrement operators

Practical code

```
#include <stdio.h>
int main()
{
   int a = 25, b = 30;
   float c = 15.5, d = 20.5;

   printf ("a=25\tb=30\tc=25.5\td=10.5\n");
   printf("++a = %d \n", ++a);
   printf("--b = %d \n", --b);
   printf("++c = %f \n", ++c);
   printf("--d = %f \n", --d);

   return 0;
}
```

Output



Practical Number 7

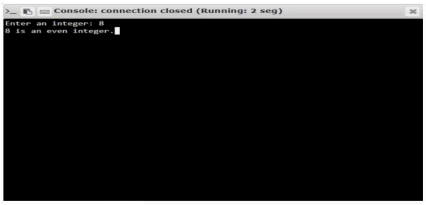
Practical name:Program to use conditional statements: if-else, If else ladder

Practical code

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

```
{
   int number;
   printf("Enter an integer: ");
   scanf("%d", &number);
   if  (number%2 == 0)
   {
      printf("%d is an even integer.",number);
   }
   else
   {
      printf("%d is an odd integer.",number);
   }

   return 0;
}
```

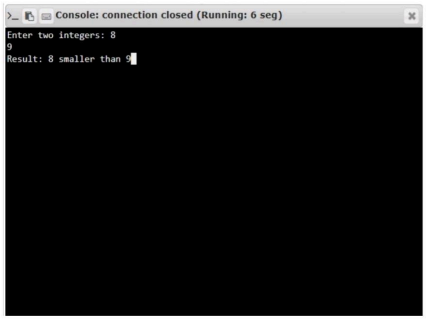
Output




```
#include <stdio.h>
int main()
 {
   int number1, number2;
   printf("Enter two integers: ");
   scanf("%d %d", &number1, &number2);
   if(number1 == number2)
 {
      printf("Result: %d equals to %d",number1,number2);
   }
 else if (number1 > number2)
{
      printf("Result: %d greater than%d", number1, number2);
   }
   else
{
```

```
        printf("Result: %d smaller than %d",number1, number2);
    }
return 0;
}
```

Output



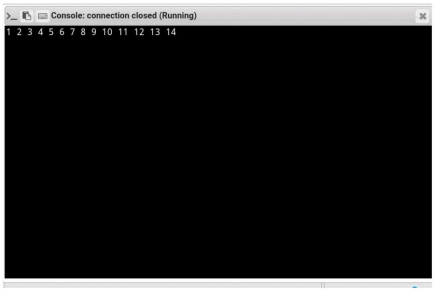
Practical Number 8

Practical name:Program to use for loop, nested for loop

Practical code

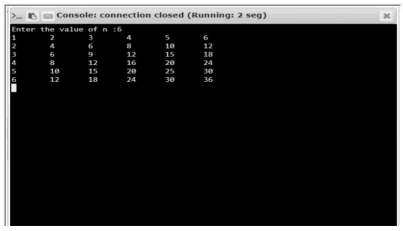
```
#include <stdio.h>

int main()
{
  int i;

  for (i = 1; i < 15; ++i)
  {
    printf("%d ", i);
  }
  return 0;
}
```

Output



```
#include <stdio.h>
int main()
{
  int n;
  printf("Enter the value of n :");
  scanf("%d",&n);
  for(int i=1;i<=n;i++)
  {
     for(int j=1;j<=n;j++)
     {
        printf("%d\t",(i*j));
     }
     printf("\n");
  }
     return 0;
}
```

Output



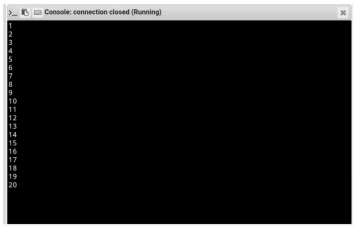
Practical Number 9

Practical name:Program to use while loop, do-while loop

Practical code

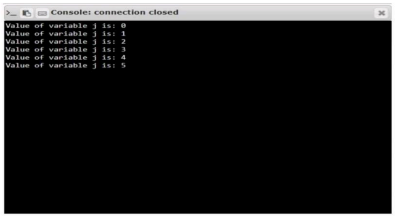
```
#include <stdio.h>
int main()
{
   int i = 1;
 while (i <= 20)
   {
      printf("%d\n", i);
      ++i;
   }
return 0;
}
```

Output




```
#include <stdio.h>
int main()
{
int j=0;
do
{
printf("Value of variable j is: %d\n", j);
j++;
}
while (j<=5);
return 0;
}
```

Output



Practical Number 10

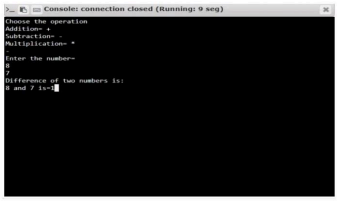
Practical name:Program to use switch (break & continue)

Practical code

```
#include <stdio.h>
int main()
{
 char n;
 int a,b;
 printf("Choose the operation\n");
 printf("Addition= +\n");
  printf("Subtraction= -\n");
  printf("Multiplication= *\n");
```

```
 scanf("%c",&n);
  printf("Enter the number=\n",a,b);
  scanf("%d%d",&a,&b);
  switch(n)
  {
     case '+':
     //Addition
     {
        printf("Sum of two numbers is:\n");
        printf("%d and %d is=%d",a,b,a+b);
        break;
     }
     case '-':
     //Subtraction
     {
        printf("Difference of two numbers is:\n");
        printf("%d and %d is=%d",a,b,a-b);
        break;
     }
     case '*':
     //Multiplication
     {
        printf("Product of two numbers is:\n");
        printf("%d and %d is=%d",a,b,a*b);
        break;
     }
  }
}
```

Output



Practical Number 11

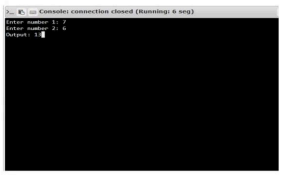
Practical name:Program to implement and use functions

Practical code

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

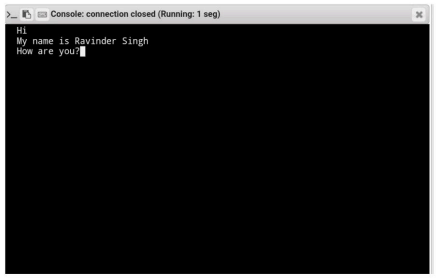
```
int addition(int num1, int num2)
{
    int sum;
    sum = num1+num2;
    return sum;
}
int main()
{
    int var1, var2;
    printf("Enter number 1: ");
    scanf("%d",&var1);
    printf("Enter number 2: ");
    scanf("%d",&var2);
    int res = addition(var1, var2);
    printf ("Output: %d", res);
  return 0;
}
```

Output




```
#include <stdio.h>
 void introduction()
{
   printf("Hi\n");
   printf("My name is Ravinder Singh \n");
   printf("How are you?");
}
int main()
{
    introduction();
    return 0;
}
```

Output



Practical Number 12

Practical name:Program to use arrays

Practical code

```
#include <stdio.h>
int main()
{
    int marks[10], i, n, sum = 0, average;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    for(i=0; i<n; ++i)
    {
        printf("Enter number%d: ",i+1);
        scanf("%d", &marks[i]);
        sum += marks[i];
    }

    average = sum/n;
    printf("Average = %d", average);

    return 0;
}
```

Output

Practical Number 13

Practical name:Program to use structures

Practical code

```
#include<stdio.h>
#include <string.h>
struct student
{
int rollno;
char name[10];
};
int main()
{
int i;
struct student st[2];
printf("Enter Records of 2 students");
for(i=0;i<2;i++)
{
printf("\nEnter Rollno:");
scanf("%d",&st[i].rollno);
printf("\nEnter Name:");
scanf("%s",&st[i].name);
}
printf("\nStudent Information List:");
for(i=0;i<2;i++)
{
printf("\nRollno:%d, Name:%s",st[i].rollno,st[i].name);
}
  return 0;
}
```

Output