Ayesha Zamurd

49733

BSCS-5

Lab 06

1. **Write a C program that print your name and sap id and Show the output.**

Code:

```
[node1] (local) root@192.168.0.18 ~
$ touch program.c
[node1] (local) root@192.168.0.18 ~
$ pico program.c
bash: pico: command not found
[node1] (local) root@192.168.0.18 ~
$ nano program.c
bash: nano: command not found
[node1] (local) root@192.168.0.18 ~
$ ls
program.c
[node1] (local) root@192.168.0.18 ~
$ vi program.c
```

```c
#include <stdio.h>
int main()
{
printf("Name:Ayesha Zamurd\n");
printf("Sap id: 49733");
return 0;
}
```

```
[node1] (local) root@192.168.0.18 ~
$ gcc program.c -o prgm
[node1] (local) root@192.168.0.18 ~
$ ./program
bash: ./program: No such file or directory
[node1] (local) root@192.168.0.18 ~
$ ./program.c
bash: ./program.c: Permission denied
[node1] (local) root@192.168.0.18 ~
$ ./prgm
Name:Ayesha Zamurd
Sap id: 49733[node1] (local) root@192.168.0.18
```

2. **Write a C program that asks the user to enter a number and determine whether the number entered is even or odd.**

   Show the output

Code:

```
$ touch program2.c
[node1] (local) root@192.168.0.18
$ vi program2.c
[node1] (local) root@192.168.0.18
```

```c
#include <stdio.h>
int main()
{
int num;
printf("Enter a numbe:\n");
scanf("%d",&num);
if(num%2 ==0)
{
printf("The number is even",num);
}
else
{
printf("The number is odd.",num);
```

```c
}
return 0;
}
```

```
$ gcc program2.c -o prgm2
[node1] (local) root@192.168.0.18 ~
$ ./prgm2
Enter a numbe:
3
The number is odd.[node1] (local) root@192.168.0.18 ~
$
```

3. **Write a C program to calculate the factorial of a number using a while loop take a number from user.**

Code:

```
[node1] (local) root@192.168.0.18 ~
$ touch program3.c
```

```c
1 #include <stdio.h>
2 int main()
3 {
4 int num,fac=1,i;
5 printf("Enter a number: ");
6 scanf("%d",&num);
7 if (num<0)
8 {
9 printf("The fictorial of a negative number is not defined.\n");
10 }
11 else
12 {
13 i=num;
```

```c
14 while(i>0)
15 {
16 fac*=i;
17 i--;
18 }
19 printf("Factorial of %d is %d\n", num,fac);
20 }
21 return 0;
22 }
```

```
$ vi program3.c
[node1] (local) root@192.168.0.18 ~
$ gcc program3.c -o prgm3
[node1] (local) root@192.168.0.18 ~
$ ./prgm3
5
Enter a number: Factorial of 5 is 120
```

4. Write a C program that uses an infinite for loop to print a name continuously.

Code:

```
$ touch program4.c
[node1] (local) root@192.168.0.18
$ vi program4.c
[node1] (local) root@192.168.0.18
```

```c
1 #include <stdio.h>
2 int main()
3 {
4 for(;;)
5 {
6 printf("Ayesha Zamurd \n");
7 }
8 return 0;
9 }
```

```
[node1] (local) root@192.168.0.18 ~
$ gcc program4.c -o prgm4
[node1] (local) root@192.168.0.18 ~
$ ./prgm4
```

```
Ayesha Zamurd
Ayesha Zamurd
Ayesha Zamurd
Ayesha Zamurd
Ayesha Zamurd
Ayesha Zamurd
Ayesha Zamurd
Ayesha Zamurd
^Cesha Zamurd
[node1] (local) root@192.168.0.18 ~
$ ^C
^C
[node1] (local) root@192.168.0.18 ~
$
```

5. **Write a program to print average of three numbers in c program.**

Code:

```
[node1] (local) root@192.168.0.18 ~
$ touch program5.c
[node1] (local) root@192.168.0.18 ~
$ vi program5.c
```

```c
1 #include <stdio.h>
2 int main()
3 {
4 float num1,num2,num3,avg;
5 printf("Enter a number :\n");
6 scanf ("%f,%f,%f"&num1,&num2,&num3);
7 avg=(num1+num2+num3)/3;
8 printf("The average of %.2f,%.2f and %.2f is %.2f :", num1,num2,num3,avg);
9 return 0;
10 }
11 []
```

```
$ gcc program5.c -o prgm5
[node1] (local) root@192.168.0.18 ~
$ ./prgm5
8 6 4
Enter a number :The average of 8.00,6.00 and 4.00 is 6.00 :[node1] (local) root@192.168.0.18 ~
```