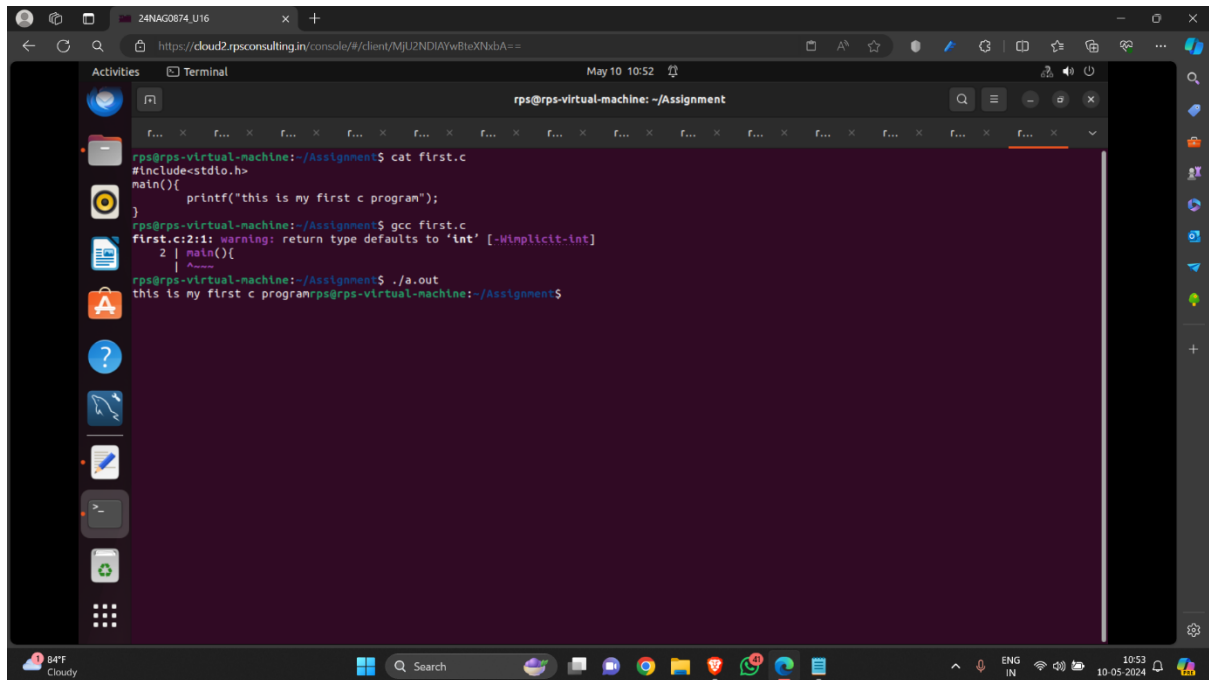


1. TASK 1

First Program in C



```
rps@rps-virtual-machine: ~/Assignment
rps@rps-virtual-machine:~/Assignment$ cat first.c
#include<stdio.h>
main(){
    printf("this is my first c program");
}
rps@rps-virtual-machine:~/Assignment$ gcc first.c
first.c:2:11: warning: return type defaults to 'int' [-Wimplicit-int]
  2 | main(){
    | ^~~~~
rps@rps-virtual-machine:~/Assignment$ ./a.out
this is my first c programrps@rps-virtual-machine:~/Assignment$
```

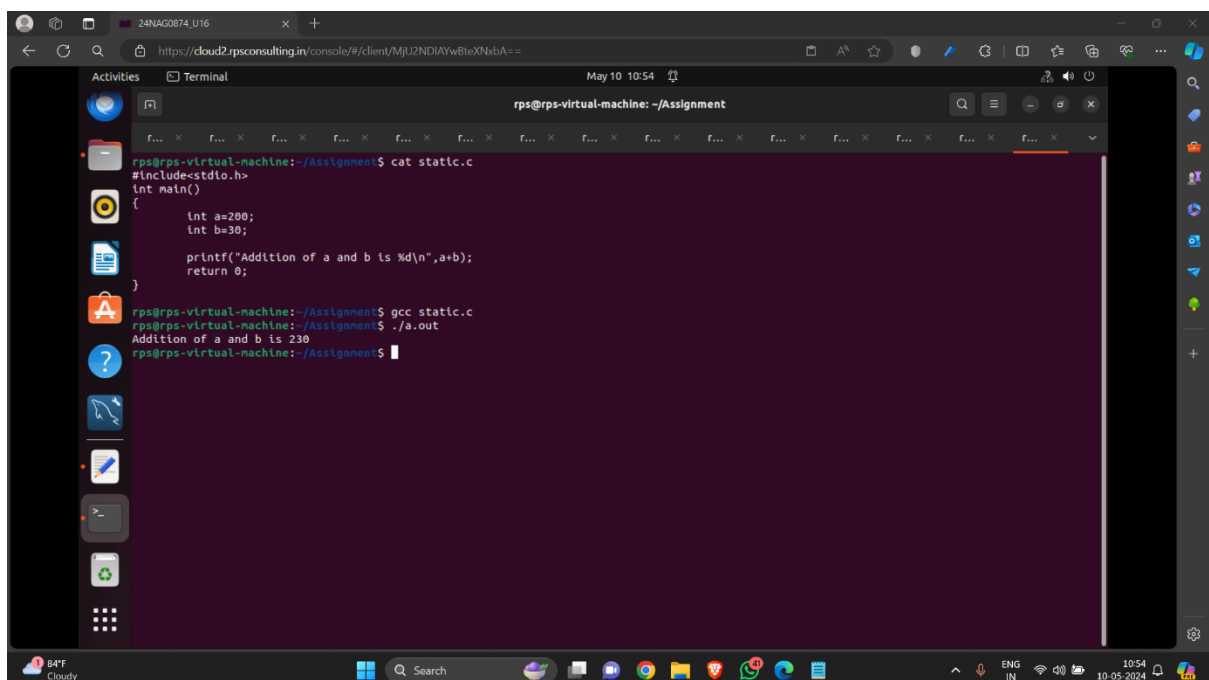
2. TASK 2

Add two numbers

Static input

Dynamic input

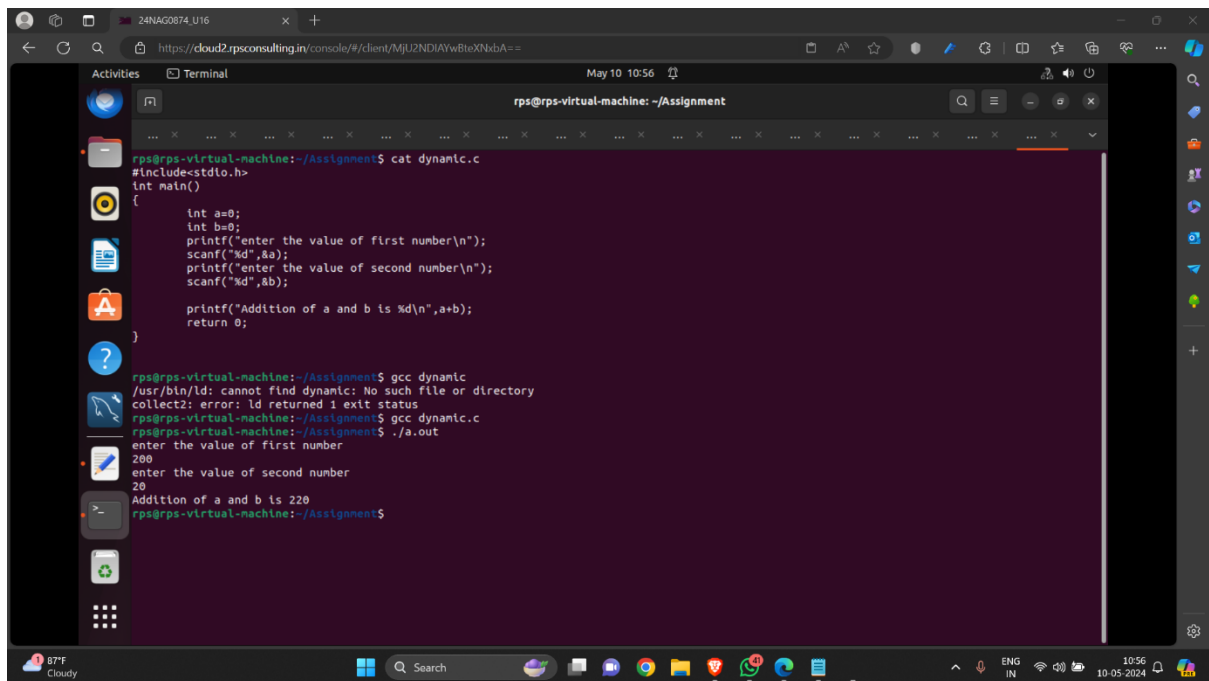
- Static input



```
rps@rps-virtual-machine: ~/Assignment
rps@rps-virtual-machine:~/Assignment$ cat static.c
#include<stdio.h>
int main()
{
    int a=200;
    int b=30;

    printf("Addition of a and b is %d\n",a+b);
    return 0;
}
rps@rps-virtual-machine:~/Assignment$ gcc static.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
Addition of a and b is 230
rps@rps-virtual-machine:~/Assignment$
```

- Dynamic input



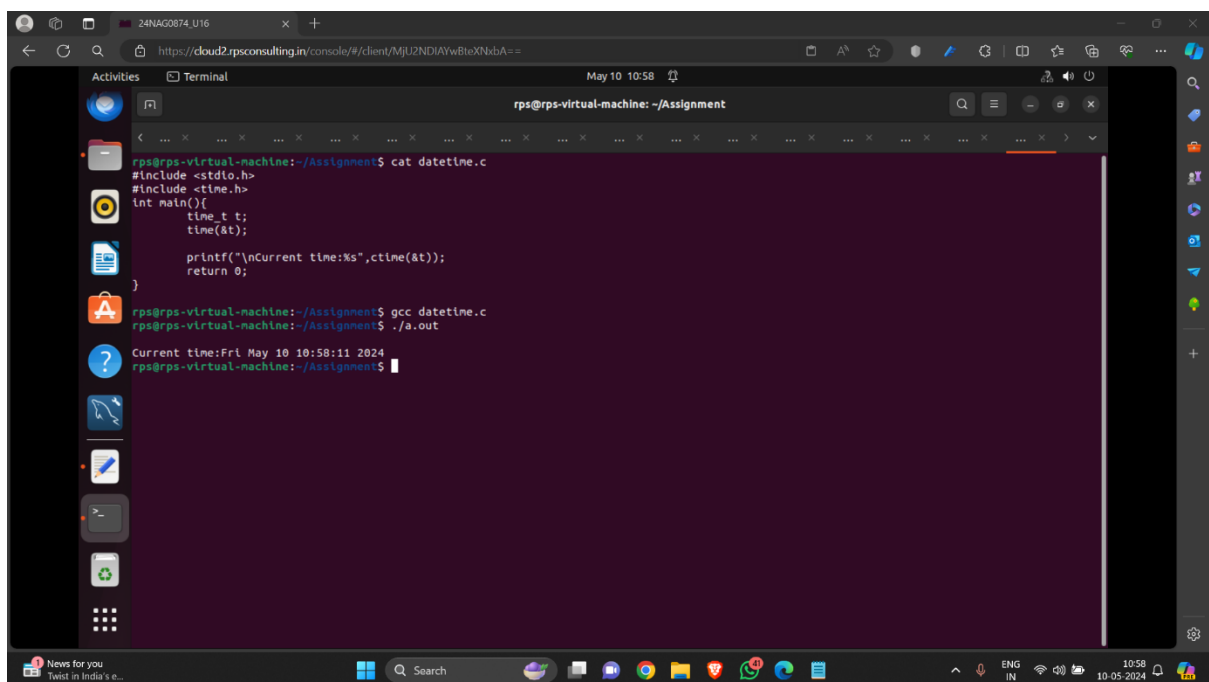
```
rps@rps-virtual-machine: ~/Assignment
rps@rps-virtual-machine:~/Assignment$ cat dynamic.c
#include<stdio.h>
int main()
{
    int a=0;
    int b=0;
    printf("enter the value of first number\n");
    scanf("%d",&a);
    printf("enter the value of second number\n");
    scanf("%d",&b);

    printf("Addition of a and b is %d\n",a+b);
    return 0;
}

rps@rps-virtual-machine:~/Assignment$ gcc dynamic
/usr/bin/ld: cannot find dynamic: No such file or directory
collect2: error: ld returned 1 exit status
rps@rps-virtual-machine:~/Assignment$ gcc dynamic.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
enter the value of first number
200
enter the value of second number
20
Addition of a and b is 220
rps@rps-virtual-machine:~/Assignment$
```

3. TASK 3

Date and Time print on screen



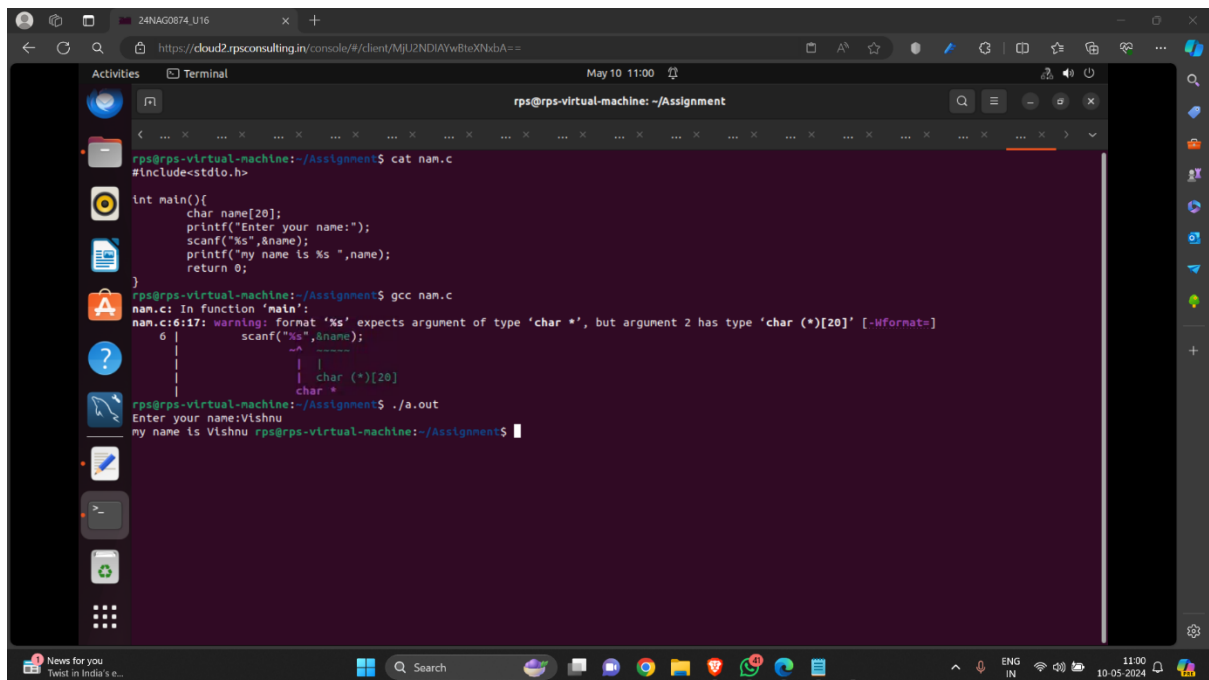
```
rps@rps-virtual-machine: ~/Assignment
rps@rps-virtual-machine:~/Assignment$ cat datetime.c
#include <stdio.h>
#include <time.h>
int main(){
    time_t t;
    time(&t);

    printf("\nCurrent time:%s",ctime(&t));
    return 0;
}

rps@rps-virtual-machine:~/Assignment$ gcc datetime.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
Current time:Fri May 10 10:58:11 2024
rps@rps-virtual-machine:~/Assignment$
```

4. TASK 4

Take input from User to enter their name, and on the screen

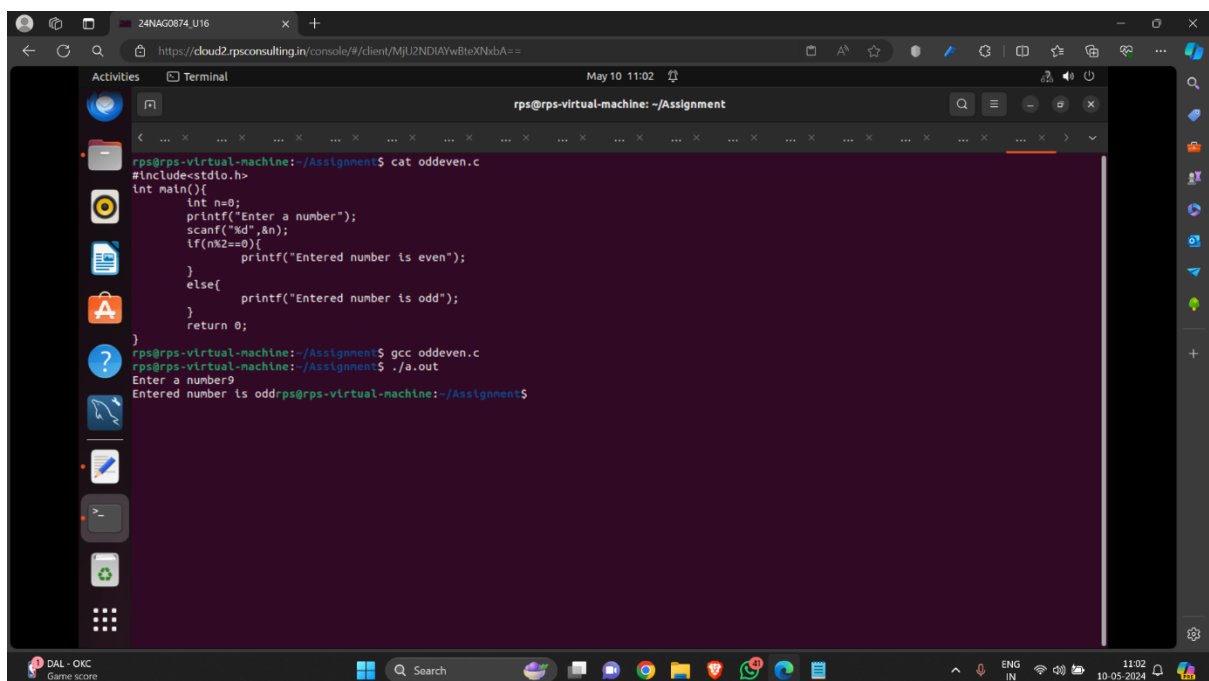


```
rps@rps-virtual-machine: ~/Assignment
rps@rps-virtual-machine:~/Assignment$ cat nam.c
#include<stdio.h>

int main(){
    char name[20];
    printf("Enter your name:");
    scanf("%s",&name);
    printf("my name is %s ",name);
    return 0;
}
rps@rps-virtual-machine:~/Assignment$ gcc nam.c
nam.c: In function 'main':
nam.c:6:17: warning: format '%s' expects argument of type 'char *', but argument 2 has type 'char (*)[20]' [-Wformat=]
     6 |         scanf("%s",&name);
       |         ^~~~~
       |         |
       |         | char (*)[20]
       |         | char *
rps@rps-virtual-machine:~/Assignment$ ./a.out
Enter your name:Vishnu
my name is Vishnu rps@rps-virtual-machine:~/Assignment$
```

5. TASK 5

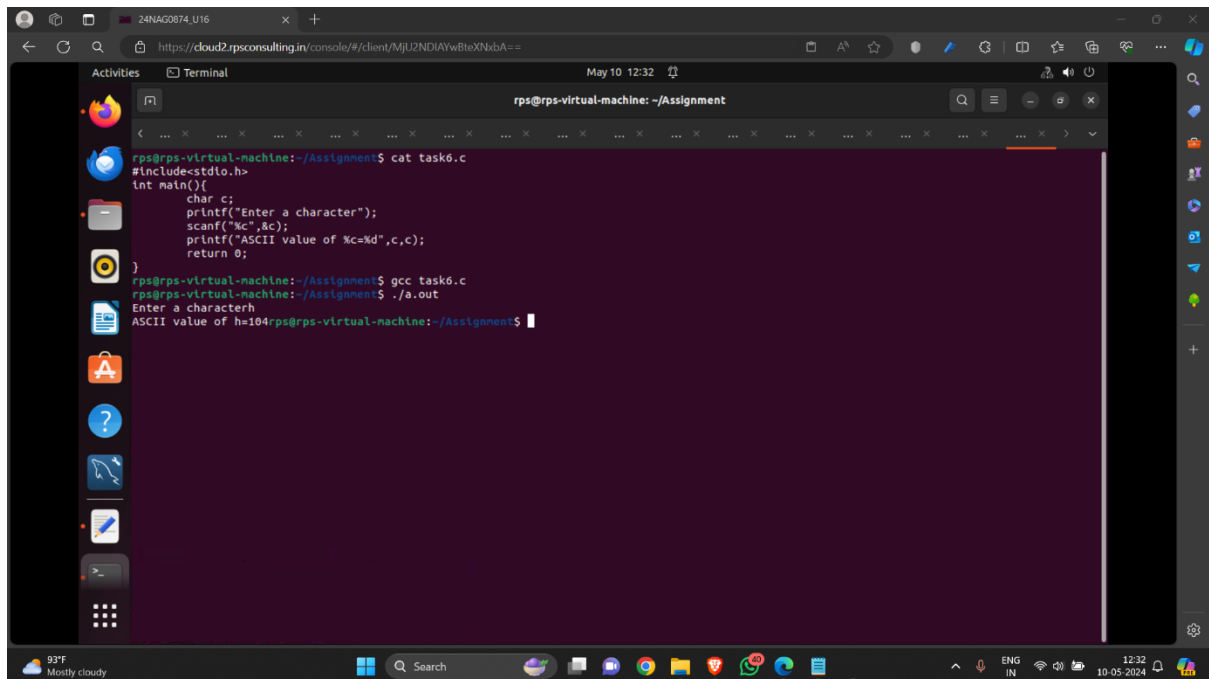
Odd or Even number



```
rps@rps-virtual-machine: ~/Assignment
rps@rps-virtual-machine:~/Assignment$ cat oddeven.c
#include<stdio.h>
int main(){
    int n=0;
    printf("Enter a number");
    scanf("%d",&n);
    if(n%2==0){
        printf("Entered number is even");
    }
    else{
        printf("Entered number is odd");
    }
    return 0;
}
rps@rps-virtual-machine:~/Assignment$ gcc oddeven.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
Enter a number9
Entered number is oddrps@rps-virtual-machine:~/Assignment$
```

6. TASK 6

ASCII value of a character



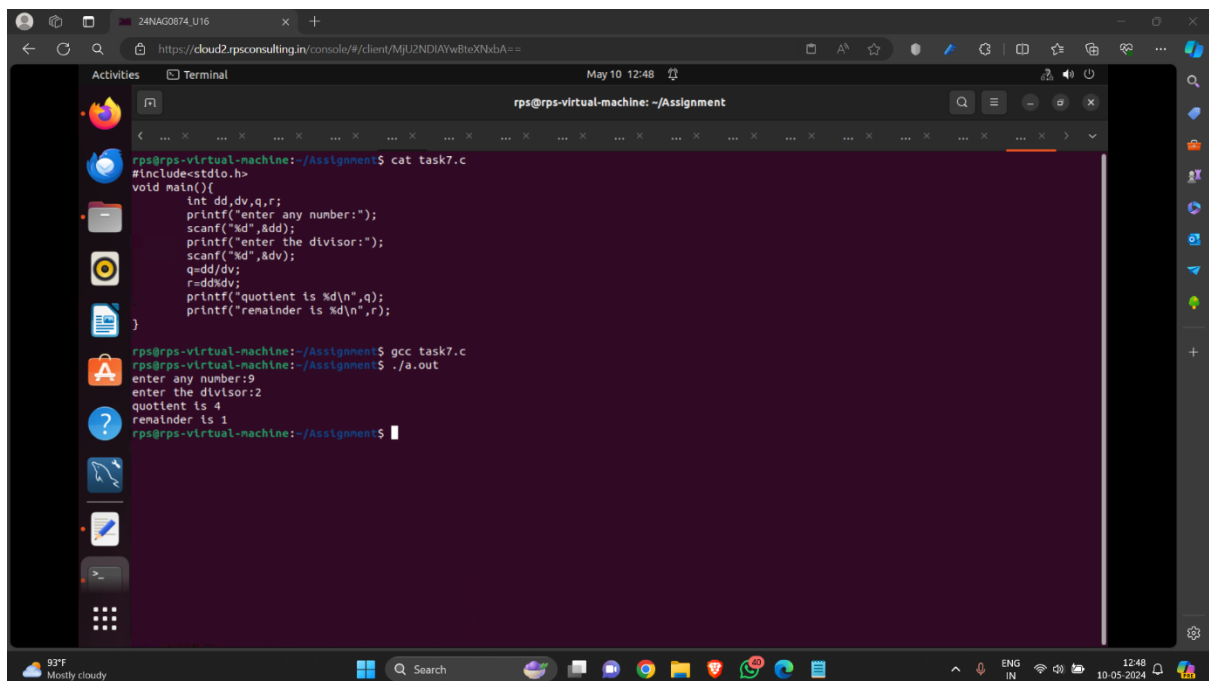
The screenshot shows a terminal window titled "rps@rps-virtual-machine: ~/Assignment" with a timestamp of May 10 12:32. The terminal displays the following commands and output:

```
rps@rps-virtual-machine:~/Assignment$ cat task6.c
#include<stdio.h>
int main(){
    char c;
    printf("Enter a character");
    scanf("%c",&c);
    printf("ASCII value of %c=%d",c,c);
    return 0;
}
rps@rps-virtual-machine:~/Assignment$ gcc task6.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
Enter a characterh
ASCII value of h=104rps@rps-virtual-machine:~/Assignment$
```

The terminal output shows that the character 'h' has an ASCII value of 104. The bottom status bar indicates a temperature of 93°F, mostly cloudy weather, and a system clock showing 12:32 on 10-05-2024.

7. TASK 7

Find quotient and remainder



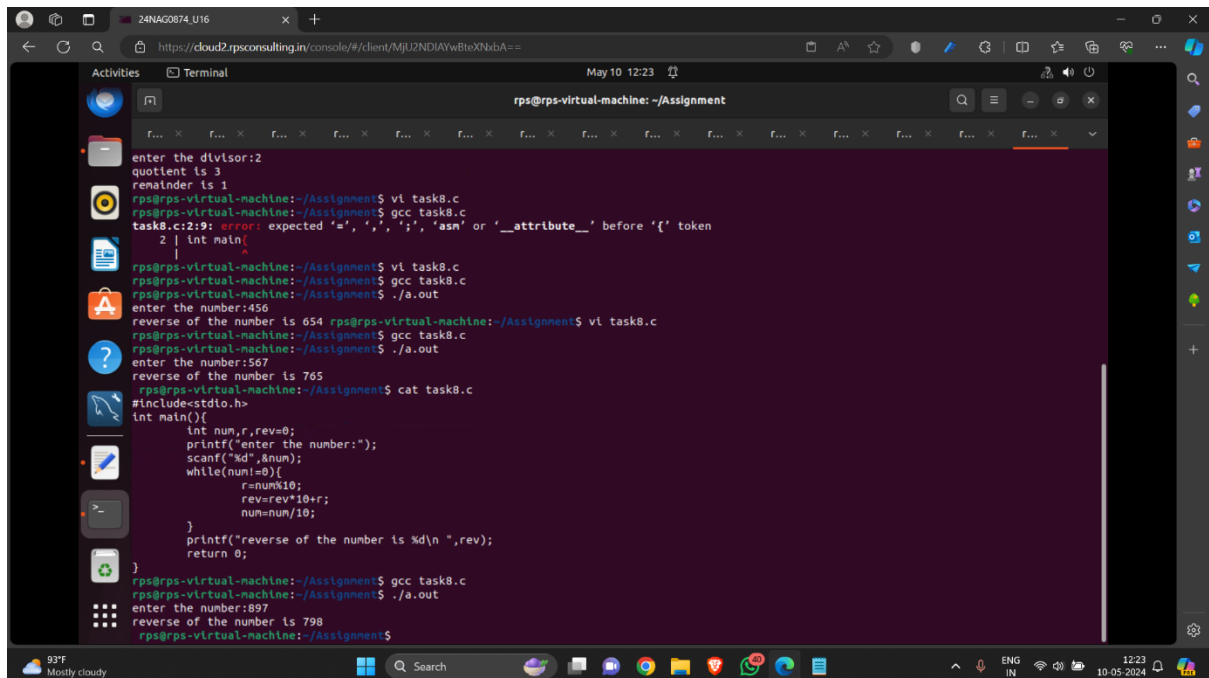
The screenshot shows a terminal window titled "rps@rps-virtual-machine: ~/Assignment" with a timestamp of May 10 12:48. The terminal displays the following commands and output:

```
rps@rps-virtual-machine:~/Assignment$ cat task7.c
#include<stdio.h>
void main(){
    int dd,dv,q,r;
    printf("enter any number:");
    scanf("%d",&dd);
    printf("enter the divisor:");
    scanf("%d",&dv);
    q=dd/dv;
    r=dd%dv;
    printf("quotient is %d\n",q);
    printf("remainder is %d\n",r);
}
rps@rps-virtual-machine:~/Assignment$ gcc task7.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
enter any number:9
enter the divisor:2
quotient is 4
remainder is 1
rps@rps-virtual-machine:~/Assignment$
```

The terminal output shows that for the input numbers 9 and 2, the quotient is 4 and the remainder is 1. The bottom status bar indicates a temperature of 93°F, mostly cloudy weather, and a system clock showing 12:48 on 10-05-2024.

8. TASK 8

Reverse a number

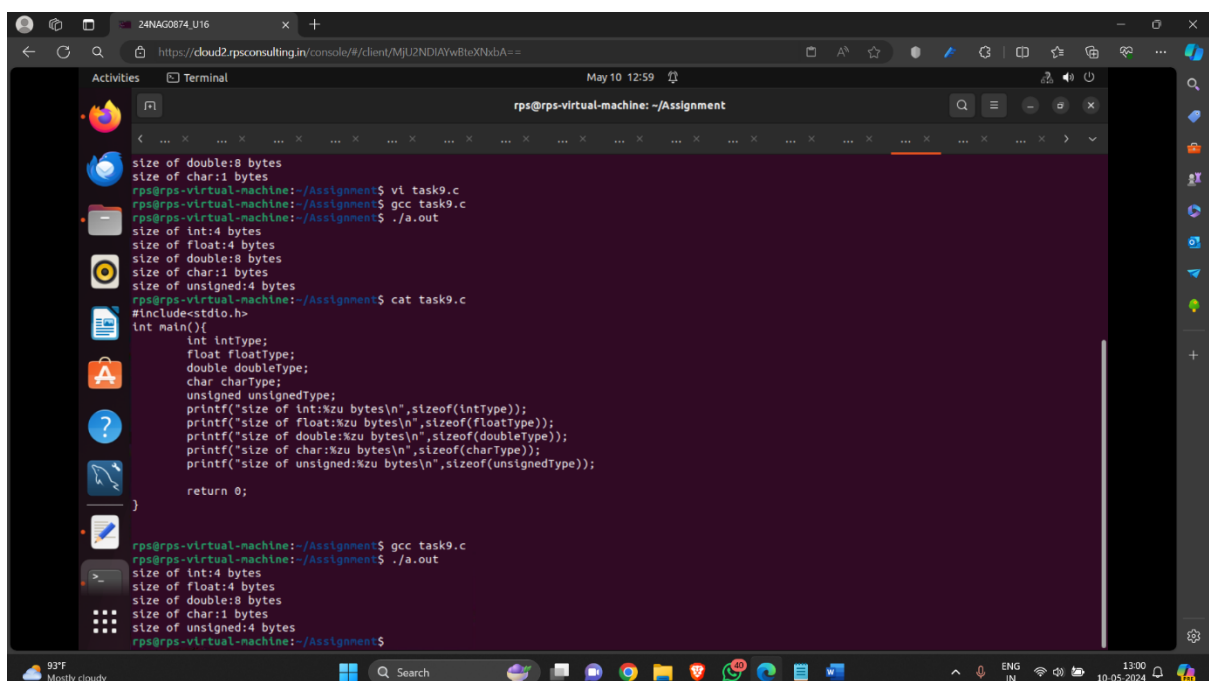


The screenshot shows a terminal window with the following content:

```
enter the divisor:2
quotient is 3
remainder is 1
rps@rps-virtual-machine:~/Assignment$ vi task8.c
rps@rps-virtual-machine:~/Assignment$ gcc task8.c
task8.c:2:9: error: expected '=', ',', ';', 'asm' or '__attribute__' before '{' token
2 | int main{
  |         ^
rps@rps-virtual-machine:~/Assignment$ vi task8.c
rps@rps-virtual-machine:~/Assignment$ gcc task8.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
enter the number:456
reverse of the number is 654 rps@rps-virtual-machine:~/Assignment$ vi task8.c
rps@rps-virtual-machine:~/Assignment$ gcc task8.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
enter the number:567
reverse of the number is 765
rps@rps-virtual-machine:~/Assignment$ cat task8.c
#include<stdio.h>
int main(){
    int num,r,rev=0;
    printf("enter the number:");
    scanf("%d",&num);
    while(num!=0){
        r=num%10;
        rev=rev*10+r;
        num=num/10;
    }
    printf("reverse of the number is %d\n",rev);
    return 0;
}
rps@rps-virtual-machine:~/Assignment$ gcc task8.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
enter the number:897
reverse of the number is 798
rps@rps-virtual-machine:~/Assignment$
```

9. TASK 9

Size of data types



The screenshot shows a terminal window with the following content:

```
size of double:8 bytes
size of char:1 bytes
rps@rps-virtual-machine:~/Assignment$ vi task9.c
rps@rps-virtual-machine:~/Assignment$ gcc task9.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
size of int:4 bytes
size of float:4 bytes
size of double:8 bytes
size of char:1 bytes
size of unsigned:4 bytes
rps@rps-virtual-machine:~/Assignment$ cat task9.c
#include<stdio.h>
int main(){
    int intType;
    float floatType;
    double doubleType;
    char charType;
    unsigned unsignedType;
    printf("size of int:%zu bytes\n",sizeof(intType));
    printf("size of float:%zu bytes\n",sizeof(floatType));
    printf("size of double:%zu bytes\n",sizeof(doubleType));
    printf("size of char:%zu bytes\n",sizeof(charType));
    printf("size of unsigned:%zu bytes\n",sizeof(unsignedType));

    return 0;
}
rps@rps-virtual-machine:~/Assignment$ gcc task9.c
rps@rps-virtual-machine:~/Assignment$ ./a.out
size of int:4 bytes
size of float:4 bytes
size of double:8 bytes
size of char:1 bytes
size of unsigned:4 bytes
rps@rps-virtual-machine:~/Assignment$
```