

deapth bucket algorithm

```
#include <bits/stdc++.h>
```

```
#include <unistd.h>
```

Using namespace std;

```
# define bucket size 500
```

```
void bucketInput(int a, int b)
```

2

if ($a > \text{bucketSize}$)

```
cout << "Init Bucket overflow";
```

3. Δx

sleep(s);

```
while (a > b) {
```

cout << "init it" << b << "bytes
outputted:"

$$a = b;$$

```
sleep(s);
```

3

$$1/b \quad (a > 0)$$

`cout << "init\t\t\t\t\t" << "\n";`

cout << "init Bucket output successful";

42

```
int main()
```



```
{ int op, pkt size;  
  cout << "Enter output size : ";  
  cin >> op;  
  for (int i=1; i <= 5; i++)  
  { sleep(rand()%10);  
    pktSize = rand()%700;  
    cout << "In Packet no " << i << " Its Packet size = "  
          << pktSize;  
    bucketInput(pktSize, op);  
  }  
  cout << endl;  
  return 0;  
}
```