```
#include<iostream.h>
#define maxn 200
#define maxM 10000
int a[maxn],c[maxn], f[maxn][maxM];
int n, M;

void input()
{
FILE *fi;
fi=fopen("knapsack2.inp","rt");
fscanf(fi,"%d%d",&n,&M);
for (int i= 1;i<=n;i++)
fscanf(fi,"%d%d",&a[i],&c[i]);
fclose(fi);
}

int max(int a, int b)
{
        return a>b?a:b;
}
void createtable()
{
for (int i = 1;i<=maxn;i++)
        f[0][i]=0;
for (int i = 1;i<=n;i++)
for (int j = 0;j<=M;j++)
        {
                if (j < a[i])
                        f[i][j] = f[i - 1][j];
                else
                        f[i][j] = max(f[i - 1][j],f[i - 1][ j - a[i]] + c[i]);
        }
}

void reftable()
{
        cout<<"Max Value : "<<f[n][M]<<endl;
}

int main()
{
        input();
        createtable();
        reftable();
        return 0;
}
/*
knapsack2.inp
6  12
5  7
```

```
1   5
6   3
4   6
9   14
5   8
*/
```